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NATURAL HEALTH, SUGAR AND THE CRIMINAL MIND

A startling, thought-provoking study of the life-and-death role of nutrition and how it may affect vital social problems

J. I. Rodale

Napoleon, Ivan the Terrible, and Hitler, juvenile delinquents and hippies may have something in common—were they sugar drunkards?

YOU ARE THE FOOD YOU EAT! says J. I. RODALE.

Too many sweets, refined white sugar, candy, cakes, pastry, ice cream . . . the surprising result, lower blood sugar. Does it account for irrational behavior, crime, even disease? Can eliminating these dangers contribute to saving your life—even your marriage?

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J. I. RODALE

PYRAMID BOOKS

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NATURAL HEALTH, SUGAR AND THE CRIMINAL MIND

A PYRAMID BOOK

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CHAPTER ONE

A Bad Boy

IN A PAPER read at the International Congress of Social Psychiatry in London on August 21, 1964, the story of a bad boy named Michael was given. Michael was very quarrelsome and could not concentrate at school. He smashed his toys and pinched his brothers. He couldn't sleep. His hands trembled. He stammered and bit his nails.

But Michael's family doctor, Richard Mackarness, had a hunch. He believed it was Michael's diet—ice cream, cakes, chocolates, refined cereals, other goodies and processed foods, that caused all his trouble.

Says the *London Mirror*:

> A week after the boy was stopped from having ice cream, biscuits, white bread, cakes, chocolates, milk chocolate and cereals, he became as good as gold.
>
> Dr. Mackarness said that to test his "cure" he let Michael eat the "goodies" again.
>
> "Within two days he was as bad as he had ever been—smashing his toys, hitting his brothers for no reason, and so irritable as to be almost beyond control," said the doctor.
>
> "His mother telephoned again in a panic, asking for advice.
>
> "I told her to put him back on his elimination diet." After that had been done, Michael turned into a well-behaved youngster again.

Dr. Mackarness said that he had given up his practice at Richmond, Surrey, to write about people with food problems like Michael's.

This is proof that you are what you eat, and very little else. Multiply Michael by twenty-five and you have a vicious mob of juvenile delinquents, or a violent window-smashing group demonstration. Take a group of twenty-five such hoodlums and feed them properly for a few months. Then set them free. Will they then go about their lives without smashing windows?

Another Case

On December 4, 1964, I received a letter from Mrs. Floyd Huber of Perryville, Missouri, as follows:

> An item I think worth mention, which I read in *Prevention* magazine, is the tests on children eating sweets. I decided to conduct a test of my own and would like to tell you of the results. For about three days I gave my son (now three years old) all the sweets he wanted during and between meals. No one could get along with him. He wouldn't mind. He would throw temper fits and break his toys. After the third day, I wouldn't let him have any kind of sweets whatsoever. Within a few days he became a different person. He no longer broke his toys, he would mind whenever you told him to do something, he just became a very docile person. I have restricted his intake of sweets ever since, and am very happy with the results.

Lee Harvey Oswald

On December 6, 1963, I addressed the Tulsa, Oklahoma, Town Hall, an audience of over a thousand persons. The next morning Beth Macklin in the Tulsa *Daily World* commented:

> Rodale is particularly concerned about the amount of sugar Americans ingest each year. "In 1900, the average annual consumption of sugar per individual was ten pounds," he said. "Today the figure is one hundred ten pounds per person. And when you consider the number of babies, older people, diabetics and others who use little sugar, I would estimate that there are people in the United States who consume as much as 600 pounds of sugar per year."
>
> Rodale said many of the nation's juvenile delinquents are eating "themselves into delinquency." He told of a test of some three thousand juvenile delinquents in New York City.
>
> "Of twenty-one potential meals a week, they ate only three at home," he said. "The rest they ate mainly in candy stores and cheap luncheonettes where they got what I call a jitterbug diet—high in sugar and refined foods content."
>
> Rodale ventured the opinion that the assassination of President Kennedy might well be traced to a low blood sugar situation. "Lee H. Oswald must have been

suffering from a low blood sugar diet," he said. "As a boy he was left alone by his mother with only a small amount of money which he probably spent in candy stores as most children and young people will. Investigators found a cola bottle lying in the book depository near the window from which they theorize the President was shot."

Amazing Reformation in a Child

A dentist, Dr. Donald Shriber of Los Angeles, writing in the September, 1958, issue of *Modern Nutrition,* tells about a patient, an eight-year-old boy named Tommy Smith.

> He would return to my office every three months with from three to five new cavities to be filled. This continued over a long period of time, resulting in a filling in every tooth including the permanent ones. At first each appointment with him was the same—kicking, biting and screaming. I could have rewarded that child with the Empire State Building and still would be bitten, kicked and screamed at. In desperation, since I had to preserve my hands (which to me are very valuable), my glasses, ear drums and nervous system, I prescribed a sugar-and-white-flour-free diet for the boy, mostly for my own protection. It worked. Six months later there were no new cavities and only one cavity a year later. I was amazed at the child's behavior while on this program.
>
> Here was a happy, contented child, who six months before had been a pint-sized tornado. His mother revealed some more facts which were amazing to me at this time. The school authorities had been seriously considering placing the child in the "retarded group" because of his inability to keep up with the class; he was continually quarreling with his sister; later there were only a few occasional spats. Before, he was having one cold after another and sore throats frequently; recently he had only one cold and no sore throats. His mother had had to continually watch his bowels, now they moved normally without laxatives. The correlation between tooth decay, the common cold, sore throats, constipation and lack of interest in his school studies seemed important to me. It was quite obvious that the absence of sugar in this boy's diet apparently was the factor which was contributing to the solution of the above dilemma.

A Doctor Helps a Boy

N. Philip Norman, M.D., of New York City, when interviewed by a *Prevention* writer, described the case of a young delivery boy in the neighborhood who was the very picture of listlessness and lethargy. He suffered from headaches and constipation and had a sallow, pimpled complexion. His employer begged him to talk to the boy and help him if he could.

> In our first conversation the young man confided to me that he was so miserable about the way he felt and looked that he had considered suicide.
>
> I told him that I could help him, but he must do exactly as I said and cooperate in every way. I knew what he ate, and I told him that he could be a new person in a week if he would only start eating regular complete meals, instead of snacks and sodas that made up most of his diet.
>
> So—the boy ate three proper meals a day, with some balance to them. That was all he did, nothing more. In three days he came to me to describe the wonderful way he'd been feeling and to thank me for changing his life. Shortly thereafter his constipation stopped, his complexion cleared completely and he had new energy and new ambition to the point at which he was planning to return to school to complete his education.

Low Blood Sugar Explained

There can be no question that low blood sugar can be caused by consuming too much sugar. This sounds hard to believe. If you eat a lot of sugar you would imagine it would raise the blood sugar, but it does not work that way. In some cases sugar consumption does raise the blood sugar, and that can lead to diabetes. In other cases, the more sugar taken the lower the blood sugar becomes. It all depends on the health of the pancreatic gland.

The function of the pancreas is to secrete insulin, and the function of insulin is to neutralize sugar excess, in order to prevent too much sugar from suddenly flooding into the circulation. We are faced with three conditions:

(1) a pancreas which secretes a normal amount of insulin,
(2) a pancreas which secretes too little insulin, and
(3) a pancreas which secretes too much insulin.

In the first case everything is fine. In the second case

there is not enough insulin to neutralize the sugar. The latter goes up, and we have diabetes. In situation three so much insulin is produced that too much of the sugar is neutralized and low sugar results. Why does it work this way? It depends on the general health of the body.

There is another situation in which a person consumes so much sugar and refined carbohydrates, which in the digestive process turn into sugar, that regardless of the condition of the pancreas, it becomes so frantic to handle the excess sugar, that it becomes overworked and loses its abilities to work with precision. It overfunctions; that is, it errs on the plus side. Too much insulin is made, not enough sugar remains, and the level of sugar in the blood falls sharply. Whichever way you look at it, too much sugar is bad—it leads either to diabetes or to low blood sugar.

It actually is not as simple as it would appear. There are other factors that enter into the situation—diseases of other organs of the body, for example—but the fact remains that millions are suffering from low blood sugar and diabetes, mostly because of the national "jitterbug" diet.

And, as will be shown later, a low blood-sugar condition (hypoglycemia) leads to a disturbed mind, or a condition close to insanity.

If you wish to read up on the subject of sugar, get *Body, Mind and Sugar* by E. M. Abrahamson, M.D., and A. W. Pezet (Henry Holt, New York, 1963).

CHAPTER TWO

Air France Employees

AN EVALUATION OF the mental status of two hundred fifty employees of Air France recently yielded a wide range of mental disorders. The most prevalent group of conditions consisted of neurotic depressive reactions and neuroses in general. The findings underlined the importance of psychiatric evaluation in the selection of personnel and of the recognition of the effects of "extra-professional conflicts" on performance. This is according to an item in *Aerospace Medicine* (January, 1966).

I have traveled the airlines a good bit, having crossed to Europe about twenty times since 1950. I have seen many a cola bottle in the commissary, hidden away for the use of the personnel. I have even seen the personnel drinking such over-sugarized beverages. I have seen other health breaches on the part of air pilots.

It is not a psychiatric evaluation which is needed. What is required is a common-sense nutritional analysis of the situation.

Malnutrition and Delinquency

In an investigation in New York, Dr. A. S. Church found and reported in the *New York State Journal of Medicine,* (1954, Vol. 45, p. 74) that there were evidences of malnutrition in not less than 80 per cent of 750 boys admitted to an institution for juvenile delinquents.

Nutrition Affects Politics

Napoleon's statement that "an army marches on its stomach" may have been a profound insight into the importance of adequate nutrition, according to Dr. Helen A. Hunscher, chairman of the Department of Nutrition at Western Reserve University. She claims that undernutrition (deficit in food quantity) and malnutrition (deficit in the quality) can lead to political unrest and rebellion. (*Western Reserve University Outlook, Fall,* 1965)

Benson Links Eating to Delinquency Rise

Ezra Benson, Secretary of the U. S. Department of Agriculture, told a Lincoln Day dinner audience at the National Youthpower Congress that there are great deficiencies in the diet of teenagers. Regarding this talk, the *New York Times* (Feb. 18, 1960) quoted him: "Lack of knowledge about proper eating was a factor in the weakening of American family life and the rise of juvenile delinquency."

Experiment with Mental Patients

An experiment was performed with a small group of male patients at the State Hospital at Elgin, Illinois, in which a group lived on a diet deficient in vitamin B. It took about a year and a half for results to show. According to the *American Journal of Psychiatry,* in which the experiment was written up, "Men who had been moving about actively, helping in the work, or talking to one another,

lost interest and ambition, became dull, sat in their chairs or lay in their surroundings."

Then there was another group in which certain vitamin deficiencies were made a little more stringent. After only four to six months, "Mental abnormalities became much worse. One old man who had been quite amiable became infuriated and threatened to break up the furniture and escape. A young man who had been subject to bad temper fits which ordinarily lasted a minute or so, once or twice a year, went into blind rages. These occurred in quick succession and lasted a half-hour to an hour. During this time he would scream at the top of his lungs, throw heavy objects at anyone within reach and curse at the women attendants."

But as soon as their diets were supplemented with yeast extract to give them the missing vitamin B, their symptoms dramatically cleared up. "The rage of the terrible-tempered old man subsided overnight and he became his former amiable self again. The young man who had endangered the lives of all around him appeared self-controlled the day after he was given yeast extract. Only one old man took several weeks to regain his former contentedness."

There is a direct relation between over-sugar-consumption and a vitamin B deficiency.

Sugar Robs Vitamin B

The practice of consuming sugar results in robbing the body of its vitamin B. It is that portion of vitamin B called thiamine which is destroyed. Thiamine is one of the most important vitamins for good health. It is necessary for growth, good appetite, smooth functioning of the digestive tract. It plays so big a part in nerve health that it is called the "morale" vitamin. Most important of all, thiamine is vitally concerned with the digestion and assimilation of all carbohydrate foods—the sugars and starches. It must be present in considerable quantity if these foods are to be used at all by the body.

Thiamine is stolen from our bodies by these robber foods—white sugar, synthetic sugar, white flour, prepared cereals and many other refined and processed foods. If you eat carbohydrates in natural forms you do not experience any thiamine deficiency because the thiamine to digest the sugar or starch is present in the natural food. For instance,

blackstrap molasses contains a great deal of natural sugar. It also has thiamine and a number of the other B vitamins, ready to go to work. Refined white sugar is the produce that remains after all these B vitamins as well as many other valuable minerals have been removed from the molasses. When you eat white sugar in coffee, cakes, candies, pies, ice cream and soft drinks, you are presenting your digestive tract with large quantities of sugar to be digested and no thiamine or other B vitamins to aid in the process. In order to handle this sugar at all, the body must steal thiamine from other processes and from its storage places in the liver, kidney and heart. This means that if you eat much white sugar, if you eat some of it every day, you are almost bound to suffer from thiamine deficiency. If you are a heart case such a dietary habit is cold suicide.

If there is an environment conducive to the favoring of a career in crime, then there must be an adequacy of thiamine in the body to prevent such a tendency.

Pupils Get Free Breakfasts

According to an Associated Press dispatch of April 3, 1965, ninety-five students at the Grant School, Memphis, Tennessee are going to be given free breakfasts because Frank Lewis, the principal, thinks that lack of good nutrition is the cause of poor school work.

It is a move in the right direction. But will the Grant School follow the diet recommended by Dr. Mackarness? (Chapter One)

I can see large feeding centers some day in our big cities where problem children will be given free meals and lectures describing the part that food plays in building human character.

More Money—More Sugar—More Delinquency

In the New York *Herald Tribune* (Feb. 27, 1960) Katherine B. Oettinger, chief of the Children's Bureau of N.Y.C. Department of Health, in a report issued by her department, said, "The study also suggests that the delinquency is more likely to increase in a time of prosperity than in a time of depression." Is it possible that in a time of prosperity more money is given to children, much of which is used for ice cream, candy, soda pop and such things?

Dr. Wilder and Low Blood Sugar

In 1943 Joseph Wilder, M.D., of New York City pub-

lished the results of work which proved conclusively that there is a direct connection between a person's low blood sugar and a tendency to be a criminal. In some cases it turns people into neurotics. Dr: Wilder wrote about his findings in *The Nervous Child,* for April, 1943-44.

Where children are concerned, it seems that low blood sugar may be far more serious for them than for adults, " . . . for," says Dr. Wilder, "the importance of nutrition for mental (and physical) functioning is much greater in children than in adults. In adults faulty or insufficient nutrition may alter or impair specific or general mental functions, and eventually cause reparable or even irreparable structural damage of the central nervous system. In children we face a grave additional factor. The development of the brain may be retarded, stopped, altered, and thus the mental functions may become impaired in indirect and not less serious ways."

Here are some of the symptoms of low blood sugar in children: The child overeats, or does not want to eat at all. Impairment of memory in the form of amnesia is one of the most common happenings in more severe cases of low blood sugar. When the child states that he did not do or say a certain thing, he may actually not remember. The child may not sleep well. Nightmares, sleepwalking or even bedwetting may be symptoms. He does not learn. Cases have been reported in which the child failed in one subject only. He may be absent-minded or mischievous or cannot remember anything. Such things occur generally during morning classes, around ten or eleven o'clock. This is the time at which the child's blood sugar is probably lowest. "Laziness may be caused by hypoglycemia (low blood sugar)" says Dr. Wilder, "with mental fatigue, dullness, indifference, lack of initiative and above all, severe inability to make decisions." Dawdling is a symptom of low blood sugar.

"The child may be neurotic, psychopathic or have criminal tendencies," says Dr. Wilder, "and be subject to anxiety, running-away tendencies, aggressiveness, a blind urge to activity, and destructiveness, with impairment of moral sensibilities like shame. In its simplest form," he says, "it is the tendency to deny everything, contradict everything, refuse everything at any price. . . . It is no wonder that a considerable number of criminal and semi-criminal acts

have been observed in children's hypoglycemic (low blood sugar) states, ranging from destructiveness or violation of traffic regulations all the way to bestiality, arson and homicide."

He goes on to say, "The well known problem of the relation of poverty to crime calls for an investigation from the angle of hypoglycemia (low blood sugar). In such an investigation we must also keep in mind the possible irreparable anatomical damage and arrest the development in young brains caused by malnutrition in childhood, even if the patient or criminal does not present any metabolic abnormalities at the time of investigation."

In an article in *The Handbook of Correctional Psychology,* Dr. Wilder proceeds to discuss many well-documented cases of criminal acts performed by individuals suffering from low blood sugar. Tests indicated without a shadow of a doubt that each individual was in a state of low blood sugar at the time the crime was committed. The crimes range all the way from homicide to sadism, arson, serious traffic violations, mutilation, violent aggressiveness, etc. In fact, the article sounds as if you might be reading today's and yesterday's newspaper.

And recurring throughout are statements like this: "After the patient's arrest, his family physician notified the defense that two years prior to the crime, a sugar tolerance curve (blood sugar test) had shown a tendency to hypoglycemia."

CHAPTER THREE

Napoleon

NAPOLEON WAS ADDICTED to sugar and pastries. A friend of mine, reading a biography of Napoleon, said it quoted him as being a lover of sugar and pastry. He would get up in the middle of the night to eat such food. Unfortunately my friend cannot remember the name of the book, so I began a search in the literature. Here are some excerpts from *Napoleon Immortal,* by James Kemble (John Murray, London):

p. 166: "He was very fond of chocolate . . ."

p. 238: "The sad unhappy man, who had had little enough family life for many a year, seems to have quite enjoyed these weeks, chatting around the fireside, and playing whist for sugar plums."

p. 256: "Napoleon himself was soon in quite a jovial mood, toasted his host in three glasses of champagne and gave his grandchildren each a lump of liquorice from his pocket."

Another piece of evidence is the fact that the "napoleon" was named after Bonaparte. A napoleon, according to the dictionary, is a "rich iced fancy cake composed of layers of cake and cream or jelly."

I am not, however, basing my case on a friend's statement, a few excerpts from a book and a dictionary definition. More search in the Napoleon literature is going on, but it would not surprise me at all that part of Napoleon's warlike precocity came from a low blood sugar condition due to an over-consumption of sugar.

Hitler

Hitler was a typical example of sugar addiction relating to a tendency toward crime. Hitler was a "sugar drunkard," and a criminal. Was his love for sugar *the* most important factor that contributed to his being a shouting, trigger-brained, raving, rabble-rousing maniac? Did it cause him to lose his sense of values? The evidence is there. There can be no question about it. Hitler must have suffered from low blood sugar due to an over consumption of sugar. The symptoms are easily recognizable.

I will quote from my book, *Rodale's System for Mental Power and Natural Health* (Prentice-Hall, Inc., Englewood Cliffs, N.J., 1966.):

> Ernst Hanfstaengl, Hitler's personal pianist, wrote a book about him called *Unheard Witness* (Lippincott), which throws a great deal of light on Hitler's diet. He showed that Hitler could never get enough of his favorite whipped-cream cakes. There was always a box of candy near him. He could not drink wine unless he put sugar in it. In the early days of his career, when Hitler was in jail, his friends deluged him with boxes of candy, knowing of his predilection for it.
>
> "He did have some curious tastes. He had the most incredibly sweet tooth of any man I have ever met and

could never have enough of his favorite Austrian cakes heaped with whipped cream. At one meal I thought I would treat him to a bottle of Prinz Metternich's best Gewurtztraminer (wine). I was called out of the room to the telephone and as I came back, caught him putting a heaping spoonful of sugar in the glass. I pretended I had not seen and he drank the concoction with evident relish. . . "

"We have prepared a welcoming dinner, turkey, followed by the rich Austrian pastries that he loved. I noticed that he was hardly drinking at all, so there was no need to keep the sugar bowl out of his reach."

In *The Rise and Fall of the Third Reich* (Simon & Schuster, New York), author William L. Shirer confirms the fact that Hitler craved sweets. Here are several excerpts from this book:

On the afternoon of Sunday, January 29th, while Hitler was having coffee and cakes with Goebbels and other aides, Hermann Goering, President of the Reichstag and second to Hitler in the Nazi party, burst in and informed them categorically that on the morrow Hitler would be named Chancellor. (p. 4)

At the swank Adlon Hotel, where the party was put up in the best suite, there were chocolates for Miss Hacha (daughter of the President of Czechoslovakia) —a personal gift of Adolph Hitler, who believed that everyone else shared his craving for sweets. (p. 444)

There were several other references in this book illustrating Hitler's intense passion for sugar foods. In the book *Hitler's Secret Conversations,* there is a discussion with Admiral Fricke in which Hitler said, "Not long ago I drank for the first time in my life a really good wine, with an extraordinary bouquet. The drinkers with me said it was too sweet."

Hitler's Teeth

The fact that Hitler was a great sugar consumer is proven by the condition of his teeth. There was an article in *The Journal of the California Dental Association* (December, 1965) in which Hitler's dentist, Dr. Hugo Johannes Blaschke, describes the state of Hitler's teeth. I will quote:

After his capture, Doctor Blaschke gave a complete account of Hitler's dental record and an interesting story of Hitler as a dental patient. Hitler was an ex-

tremely difficult patient; he would tolerate no pain or discomfort. Notwithstanding the liberal use of sedatives and local anesthetics, Doctor Blaschke was forced to devitalize teeth to keep restorations painless and to avoid extractions. During his years of power Hitler's teeth were very bad. He had many missing teeth and his few remaining teeth were affected with periodontal disease and were loose. He rejected any extractions and insisted that these teeth be retained. Hitler remarked to Doctor Blaschke when more radical dental treatment was proposed that he was a vegetarian and had a special kitchen at his disposal at all times and the few remaining loose teeth were all that he needed. Doctor Blaschke also relates that he was unable to make a diagnosis when Hitler had dental pain because "Der Fuehrer" disliked intensely to talk about his health and would tolerate no questions as to duration, location or amount of the pain.

Note that Hitler was a vegetarian. I have noticed that many vegetarians, to compensate for the lack of zest in their diet due to an absence of meat, overindulge in sweets.

Although I am not a vegetarian I once went to a vegetarian restaurant on Leicester Square in London and there saw a huge showcase full of all kinds of cakes and pastries. The fact that they displayed it so prominently shows how important this kind of food is to the average vegetarian.

A Hitler Revival

Lately in Germany a certain character by the name of Adolf Von Hadden has been acting as if he is Adolf Hitler. He is the head of the National Democratic party and in his utterances expresses a nostalgia for Hitler, "who saved our homes." He screams and bellows in his speeches and promises to restore Germany to her glory.

We know that Hitler was mentally confused by a diet heavy in sugar and refined carbohydrates. He was no doubt suffering from a low blood sugar condition. Is it possible that Von Hadden also is a sugar drunkard? A simple test of his blood sugar would tell.

Sugar Causes Dental Caries

Isaac Schour, D.D.S., Ph.D., and Maury Massler, D.D.S., M.S., of Chicago have a lot to say about sugar and dental decay in an article in the *Journal of the American Dental*

Association, for July 1, 1947. These two investigators have contributed much to the literature of dental decay including a brilliant article in which they showed that fluoridated water is quite likely to be harmful to the teeth of badly nourished children, although it seems to postpone decay in children who are well nourished.

In their article they say:

> Clapp reported a remarkably low incidence of caries in young adult Italians who were born in Italy and who were living in Bridgeport, Connecticut. He pointed out that they had grown up on the Italian diet and he emphasized particularly the low intake of sugar—about one-seventh that of American boys. On the other hand, Day and Sedwick examined the teeth of five hundred children thirteen years of age and of Italian descent (whose diet, presumably, was now Americanized and high in sugar) and found no great difference between the prevalence of caries in this group and that of American children. This might lead to the supposition that dietary habits have a greater effect on the incidence of caries than does the genetic influence, although the latter cannot be discounted.

The Nurse Who Killed Babies

Did you, a few years ago, read about the nurse who killed babies? Her name was Virginia B. Jaspers, a very obese woman who killed three babies that were placed in her care. She shook them to death because they got on her nerves by refusing to take their formula. She broke the leg of a fourth infant and inflicted a head injury on a fifth. When an inquisitive newspaper reporter interviewed her, he said she showed a child's passion for ice cream and soda pop. She was a sugar addict and had to have a box of candy at her side all the time. All day long she drank sweet carbonated beverages.

Four Women Criminals

Further examples of criminals who were slaves to sugar are the cases of the four women who were executed for murder in the state of California in the last twenty years or so. The most recent was Mrs. Elizabeth Duncan, who killed her pregnant daughter-in-law. Here again a curious journalist, Eddy Jo Bernal, analyzed the character of these four women and found many similarities. These are his

words in the *Los Angeles Herald-Examiner* of August 12, 1962:

> All liked desserts and sweets . . . All the women liked candy and ice cream. Mrs. Spinelli ate ice cream and pie the night before she died. Mrs. Peete nibbled candy and offered a box of it to reporters and photographers the day before she was executed. Barbara Graham's last meal was a hot fudge sundae. Mrs. Duncan throughout her trial was munching on life-savers and peppermints.

Criminal Tendencies Affected by Nutrition

E. E. Dudding, ninety-eight years old, of the Prisoners' Relief Society, wrote a letter to the Washington (D.C.) *Daily News* which was published in its February 2, 1960, issue, as follows:

> We have found in returning convicts, a high percentage of the men released from the nation's prisons afflicted with chronic acidosis. In the early days of the Prisoners' Relief Society we discovered nearly all the inmates of our prisons were suffering with acidosis when they entered and were still afflicted when released. We traced it to the prison. Acidosis affects the mind to such an extent that a man is hardly able to take care of himself.
>
> After much research we developed a short cure for acidosis and practiced it for forty years. But we found it was a law violation to prescribe the diet we used. The District Board of Medical Examiners ordered us to stop. I think this explains the crime epidemic in Washington.

Foods that are very acid and that contribute to acidosis are sugar, bread, cereals, cakes and coffee.

The following is a letter from a reader that appeared in a recent issue of the Washington (D.C.) *Daily News*.

> I have read the different opinions about suicide in *The News* and I consulted a retired medical doctor who checked over two hundred cases of this kind. He found that in 90 per cent of the cases the victim suffered with acidosis. He explained that men, women, boys and girls suffering from acidosis have but little control over their acts, habits and emotions.
>
> Dorothy M. Brown

Acidity Caused by Sugar

In the previous item, E. E. Dudding spoke of criminals usually suffering from acidosis. Here is something about sugar causing acidity. It is from *The Truth About Sugar* by H. V. Knaggs, M.D.:

> Acidity, or sour stomach, is a common symptom among those who take cane sugars or sweetmeats to excess. The acids formed as a result of the decomposition of the sugars in the presence of meat and other proteins create a form of acid intoxication, or self-poisoning, which manifests itself in various types of catarrh or rheumatism.
>
> The chief acid produced in this way is that known as oxalic acid. Dr. Helen Baldwin has proved by a number of experiments that animals fed on meat and sugar, both of which are free from oxalic acid, until a state of extreme fermentation ensued, developed marked oxalic acid poisoning. I have repeatedly seen this condition myself among patients who are suffering from dilated or catarrhal stomachs, due to the abuse of milk and sugar foods, and when the gastric contents were in the same condition as that of the animals cited. This oxalic acid when it reaches the blood converts the soluble lime salts into an insoluble oxalate of lime, and thus induces the condition of the system known as decalcification or lime starvation.
>
> Since lime builds the teeth and bones, and gives stability to the nerves and tone to the muscles, the consequences must necessarily be serious.
>
> The abuse of sugar, owing to this action of its acid by-products upon the lime in the blood, is the usual cause among the young of rickets and decay of the teeth, of adenoid nasal growth and inflamed tonsils. . . .

Acidosis Caused by Bread

Here is an excerpt from the book *Don't Eat Bread,* published by The Rodale Press (1939) and written by a pharmacist and medical writer, Allen Klein:

> Dr. V. S. Cheney, medical director of Armour Company, from a study upon the common cold among the employees of that company, believes that the cold is a product of civilization and that conditions that produce acidosis (a state of acidity) such as might be the case in a poorly balanced diet, cause colds. It has been experimentally shown that the administration of the

chloride of ammonium, a chemical compound which induces acidosis, will produce the symptoms of a cold. Bread and cereals stand very high in the list of acid-producing foods. In fact, Dr. P. H. Belding has shown that wheat and other grains are more rapidly converted into acid products, even in the mouth, than all other foods. This is of no small importance when one considers the fact that all other so-called acid-producing foods cause an acid condition only when they are digested in the lower parts of the digestive tract. Bread and breadstuffs, therefore, play a large part in producing the condition of acidosis, which in turn so markedly lowers the resistence of the body to bacterial infection, including the bacteria or viruses which may be responsible for colds, pneumonia, etc.

Thus we see that artificial sugar and all wheat foods (whole wheat as well as white) are acid inducing, and could be a factor in setting off criminal tendencies.

CHAPTER FOUR

The Man with the Sweet Tooth

IF A SPY IS a criminal, then the following story will fit into this scrapbook. It was related in the *New York Herald Tribune* of July 24, 1965. It seems that Gerald Brooke, a twenty-seven-year-old British teacher in Moscow, was lured into anti-Soviet activities by his sweet tooth. He was apprehended and was sent to a labor camp for four years.

Brooke's attorney in court stated that a Russian named Georgi had influenced his client in London. Georgi had noticed that Brooke had a sweet tooth and had seen to it that he had plenty of candies and cakes.

No doubt Brooke was suffering from low blood sugar, which made him lose his sense of values. It is too bad that the legal authorities don't have available a blood sugar report on each case that comes before them.

A Young Man

In *The British Medical Journal* (Jan. 18, 1958) there is described a case of a young man who murdered his

mother. Upon examination he was found to be suffering from low blood sugar. There should be a sugar-study follow-up in connection with the commission of all major crimes. In fact, the whole diet of every arrested criminal should be thoroughly checked.

La Guardia

A reader of *Prevention* magazine (of which I am the editor) writes: "Fiorello La Guardia, one-time mayor of New York City, used to eat zabaglione for dessert almost every day. This is sherry wine, sugar, and egg yellow. Some of his closest long-time aides broke with him in his last term as mayor because he became so dictatorial."

In zabaglione, sugar is the major ingredient.

In his famous 1944 La Guardia report, marijuana was given a complete bill of health. It was attacked by the A.M.A.

The average sugar consumption in this country today is eleven times as much as it was in 1900, and it is still going up year by year, because the craving for it is like taking drugs. It may get so high one day, and low blood sugar may become so prevalent, that people will be shot down in the streets like dogs by sugar-crazed people. No one will be safe!

Truman Capote's In Cold Blood

On the dust jacket of this book you read as follows:

> On November 15, 1959, in the small town of Holcomb, Kansas, four members of the Clutter family were savagely murdered by blasts from a shotgun held a few inches from their faces. There was no apparent motive for the crime, and there were almost no clues.
>
> Five years, four months and twenty-nine days later, on April 14, 1965, Richard Eugene Hickock, aged thirty-three, and Perry Edward Smith, aged thirty-six, were hanged for the crime on a gallows in a warehouse in the Kansas State Penitentiary in Lansing, Kansas.

I decided to read the book to see if there were any indications in it of the diet of the two murderers. I found a few.

Early in it we find Smith breakfasting in a cafe called the "Little Jewel," in Holcomb. The author says he (Smith) "never drank coffee. He preferred root beer. Three aspirin,

cold root beer, and a chain of Pall Mall cigarettes—that was his notion of a proper 'chow-down.' "

Capote says, "All the material in this book not derived from my own observation is either taken from official records or is the result of interviews with the persons directly concerned."

At one point Richard Hickock indicated that in bars "his usual choice was an orange blossom . . . a ready-mixed compound of orange flavoring and vodka." Orange flavoring is just loaded with sugar.

At another place the details of a restaurant meal are given, the dessert being apple pie, ice cream, and coffee, with sugar, no doubt.

At another point Dick "eyed his companion's meal, an untouched hamburger and a glass of root beer in which three aspirin were dissolving.

" 'Perry, baby,' Dick said. 'You don't want that burger, I'll take it.' "

Again, "Dick ordered another hamburger. During the past few days he'd known a hunger that nothing—three successive steaks, a dozen Hershey bars, a pound of gumdrops—seemed to interrupt."

A dozen Hershey bars and a pound of gumdrops.

Later: "They stopped at a bar, Dick drank three orange blossoms."

Page 119: "If he knew Dick, and he did . . . would spend it [the money] right away on vodka [orange blossoms] and women."

And on . . . and on . . .

Would the character of these two men have been more normal if their diet had lacked sugar?

The Boston Strangler

Here is a communication, dated March 5, 1967, from Dr. W. G. Wright, chairman of the Committee on Education of the Michigan State Chiropractic Society:

"This afternoon I heard the psychiatrist, a Dr. Russell, who examined the Boston Strangler. Someone asked about his diet, and the reply was (you guessed it) 'that he just loved chocolate bars'."

Salvation Army Delinquents

Major Archibald MacCorquodale, superintendent of the Salvation Army's Concord House in Toronto, Canada, has

a great deal of confidence in youth. His work is to keep youths who are in trouble. He thinks that the hippie long-hair bit is something temporary, already passé. I think he ought to think again.

He doesn't seem to be aware of what the refined diet is doing to today's youth. In fact the diet at Concord House must be pretty bad, if there is any indication from the following in *The Toronto Globe and Mail* April 25, 1967:

> So many of the youths have bad teeth, he said, that a new wing includes a modern dental clinic, but it is not equipped for the most severe dental problems.
>
> It was not visualized that boys, sixteen and seventeen, would have teeth worn down below the gum line. We need a special machine for that. Already three boys, aged sixteen and seventeen, have been equipped with complete sets of dentures.

Major MacCorquodale, in your Concord House you have a marvelous opportunity to see what a good diet can do for delinquent boys' rehabilitation. Will you try it?

Major MacCorquodale, I wonder if you are aware that a sugarized diet is destructive to the teeth, that it also contributes to juvenile delinquency.

Rojas and Sanchi on Low Blood Sugar

In Argentina, medical researchers N. Rojas and A. F. Sanchi wrote an article on hypoglycemia and delinquents which appeared in the *Archives of Legal Medicine* (Vol. 11, p. 29) in 1941. In this article they told of doing blood-sugar tests on a group of apprehended delinquents. There was a striking percentage with low, sometimes extremely low, blood sugar.

Of the one hundred twenty-nine delinquents examined, most were juveniles, and the offenses were in thirty-two cases against persons, in sixty-five against property, in ten sex offenses and so forth. In forty-eight cases the blood sugar was less than 75 milligrams per cent and in sixty-four cases between 75 and 90 milligrams per cent. Only in thirteen cases was the blood sugar strictly within the normal limits of 90-100 milligrams per cent.

Dr. Stare Says That Sugar Calories Are Empty Calories

Fredrick Stare, M.D., of Harvard is very active in a campaign to belittle food faddism, and since I am the number one American food faddist, I take it as a personal

challenge. Dr. Stare has written a widely published syndicated health column in which he makes all kinds of misstatements.

At this time I would like to draw attention to an admission he made in a booklet entitled *The Role of Nutrition Education in Combating Food Fads,* issued by the Nutrition Foundation, Inc. of New York. He said:

> Another food the "natural food" advocates denounce is refined sugar. Their reasons are similar to those they give for refined flour. Refined sugar supplies no vitamins or minerals to the diet, just calories. This is true. But we need calories, somewhere around two thousand to three thousand of them each day! There is no reason why the average person cannot include sugar in his diet along with other foods so as to make up a balanced diet, that is one that supplies all the nutrients he needs. If he chooses a variety of foods and includes some of the "protective foods" in his diet, he will have a balanced, adequate diet, and can choose any extra calories he may need from any food he desires.

Well, Dr. Stare admits that white sugar contains no vitamins and no minerals. "But we need calories," says Stare. But why "empty" calories?

Regarding this aspect of the sugar problem Dr. Melvin Page in his book *Degeneration—Regeneration* has said:

> When we use free sugar we do so at the expense of the other essentials to the body. Our total caloric intake of food may not be changed, but the proportions of the heat-producing and cell-replacing ingredients are considerably altered. In this respect the use of sugar creates a deficiency in these other materials. In every instance where a patient has habitually used refined sugar, deficiencies have existed in the other factors of an adequate nutrition, particularly as regards the vitamin B complex.

Here is a letter from a reader of *Prevention* which will throw additional light on the emptiness and "purity" of the sugar molecule.

Jan. 17, 1963

Dear Mr. Rodale:

After watching today's program of "Food for Life," a television series from Michigan State University, I just had to write you. She makes frequent references to

"food faddists: who try to tell you that pure sugar is a drug—" You must be making quite an impression in the food world for a university to put out a series to counteract the information we get in *Prevention.* Now I realize there are other health magazines, but none, I don't think, with the circulation of *Prevention.* She admits there is nothing in white sugar but carbohydrate, but leaves the impression that it is good because it is so "pure." One statement she made was, "No other food we consume besides common table salt, sodium chloride, is so pure."

Mrs. M. P. Wallace
Lafayette, Indiana

The so-called purity of sugar is its danger. Nature wants wholeness, not fragmentation. Nature wants a package deal, not a single compound by itself; it wants that compound surrounded by vitamins and minerals. The sugar molecule is always something like $C_nH_{2n}O_n$ (carbon, hydrogen and oxygen). As you can see, it contains no minerals. It is water soluble and rushes rampaging into the bloodstream without spending much time in the digestive system. Man should eat food, not pure chemical compounds.

It is the same with salt (sodium chloride), which today is a pure compound. But in the old days it had impurities! What were these impurities? Minerals. Table salt, for example, used to contain magnesium, which today many of us are deficient in, setting up conditions which are precursors to many diseases. No. Give me my peck of dirt!

Nature Hits Back

Here is an item from the book *Nature Hits Back* by Macpherson Lawrie, M.D.:

> The increase in the consumption of sugar is the most outstanding dietetic perversion of the age. Apart from any other consideration, it upsets the whole balance of nutrition. Sugar is a fuel, and today we take into our system this purely fuel food in amounts sufficient to shatter every dietetic principle and law. Our digestive glands and organs may be adaptable, but it is impossible to believe that during the last hundred years our physiological processes have so changed as to enable our bodies to deal normally with an excess of fuel so staggering. Especially is the amount consumed in tea and other fluids remarkable. Six cups

of tea each day, each containing two lumps of sugar will alone account for over forty pounds in one year. Further in connection with its use in fluid, we must remember that, with sugar so consumed, salivary digestion is lacking. Saliva is an agent of supreme importance in the digestion of carbohydrate food, and a flow of saliva is not enlisted and as a result we must throw upon other digestive glands an abnormal strain which may have far-reaching and serious effects.

CHAPTER FIVE

Sensational Information from Germany: A German Court Physician's Experience

UNDER DATE OF June 11, 1966, there appeared a remarkable article published in *Das Neue Zeitalter,* of Munich, Germany. It concerned the work of Dr. Stutte, a court physician in Marburg, Germany, who observed what he called a strange phenomenon. I will quote:

> He noticed that in many cases crimes have been committed by persons, especially younger ones, who were suffering from so-called symptoms of lack of sugar. Hence: if there is not sufficient sugar in the blood there is a possibility of an unexpected upsurge of a criminal tendency. The person then is apparently unable to repress this tendency by reasoning.
>
> Blood sugar, the dextrose in the human blood, is extremely important. Normally, it is only 0.1 per cent, but this blood sugar is a source of energy for many physiological procedures, a stimulant and apparently the motor for brain functions.
>
> But where is the connection between the blood sugar content and crime? How is it possible that criminal actions are being committed because the persons are suffering from lack of blood sugar?
>
> Many social workers and court physicians are unable to explain the criminal actions of young people. Often they just cannot understand why a human being fifteen or eighteen years of age should have committed such senseless actions that brought him before the court,

while he should have been able to think about his future.

"That must be frivolity or insanity," is what one used to say in such cases.

The Marburg court physician, Professor Dr. H. Stutte, used to think exactly that before he found out about the connection between lack of blood sugar and crime.

Some Impressive Cases

A bakery apprentice embezzled money in order to buy sweets. Sometimes he gobbled down three boxes of chocolate candy which did not agree with him at all. But later he explained that he just had to have his candy and that his craving was stronger than his rationality and good will, and the resolution not to embezzle any more in the future.

A very strong case of blood sugar deficiency was diagnosed.

A well-known wholesale merchant suddenly entered into the most unfavorable agreements through which his company was nearly driven to bankruptcy. He was finally declared unfit to take care of the business. A physical checkup showed the highest degree of blood sugar deficiency. After treatment it was almost back to normal. But the damage to the company had been done.

The most severe case of a blood-sugar-level deficiency crisis was the one which Dr. Stutte had to examine. It was a twenty-year-old who, during such a crisis, grabbed a knife and stabbed his mother to death. He fled the house. Later he stole some sweets and, after having eaten them, turned himself in to the police.

A truck driver knew that he always felt better after eating a few sugar cubes. But he did not want his co-driver to know that he secretly indulged in eating large amounts of candy, chocolates, and sugar. Therefore he omitted the intake of this sugar for fear of being ridiculed. Half an hour later he ditched his truck. He then consumed his sugar ration and became completely reasonable, and calmly did all necessary things to save the load and to do everything else required in such a case.

Wrong Advice

The *Neue Zeitalter* writer then quotes Dr. Stutte as

advising that whenever a crime is committed a blood sugar examination should be made of all the people involved. He continues:

> Parents and mothers who observe in their children sudden exhaustion, unexplainable moods, changes in character which they cannot understand, should try to regulate the blood sugar level through a change in diet. Mostly it is possible to normalize gradually what looked like changes in character.
>
> Adults should have sense enough to give in to a sudden craving for sugar or chocolate. Often the human system sends its signals because there is a real need.
>
> But the next step should be to the doctor to find out what causes this craving for sugar.

The Common Error

Dr. Stutte has made a common error. He believes that because the blood sugar is low the cure would be to eat more sugar. He is evidently not aware how the low blood sugar condition came about in the first place. The fact of the matter is that the effect of the immediate ingestion is only temporary, that in time it will plunge the blood sugar down again, due to the pancreas over-secreting insulin when it is confronted with the sugar.

A Doctor Disagrees

A Dr. Bruker, who read about Dr. Stutte's theory, disagreed and wrote to the editor of *Das Neue Zeitalter,* who commented on it in a later issue (date unavailable). The editor published the letter but introduced it with the following comment:

> As a response to our extremely interesting article, "Criminal—Because of Lack of Blood Sugar" (published in No. 24 of DNZ, *Das Neue Zeitalter*), which was based on research done by Professor Dr. H. Stutte, a well known court physician in Marburg, Germany, we received some important additions to the theme. They came from the *Arbeitskreis Gesundheitskunde* (some organization like a working circle for health study and information) and were written by M. O. Bruker, M.D. (address: 492 Lemgo, Lippe). They will be of great value to many parents and educators. Dr. Bruker feels that criminal behavior is caused by excessive intake of sugar and not by the fact that sugar

was lacking. This is a question of scientific principle and must be solved by the scientists themselves. What is of importance for the average person are the practical conclusions which we quote in the following letter.

Letter by M.O. Bruker, M.D.

In No. 24 of your magazine *Neue Zietalter,* June 11, 1966, you report under the heading, "Criminal—Because of Lack of Blood Sugar" that a temporary drop of blood sugar below normal might cause not only physical but also mental disturbances.

It is a fact that the number of children and adults experiencing a temporary pathological drop of the sugar content of their blood is not low at all. It is also a fact that may cause more or less serious disturbances in those persons' health. There are changes in the psychological realm which cause increased irritability, apathy, and other reactions as described in your article. There is also the possibility of numerous physical damages.

The cases quoted by you (of the baker's apprentice, the wholesale merchant, the truck driver, and the twenty-year-old who misused a knife) all show the abnormal desire for sweets. According to our experiences the following has to be done to cure this unnatural and dangerous disturbance in the regulatory process of the blood-sugar level:

Strictest abstinence as far as sweets and chocolate are concerned. Although this seems unbelievable at first, the generous intake of sugar and chocolate actually is the cause for an abnormal drop in blood sugar. The yen for sweets is, in fact, not the sign of insufficient intake of sweets but, on the contrary, it is already the result of too much sugar consumption.

The examples mentioned follow in a classical manner these facts which have been proven by science beyond any shadow of a doubt:

The more sugar is consumed, the more disturbances of the regulation of blood sugar.

As a counterbalance, the system inaugurates an abnormal drop of the blood sugar which, in turn, causes an unnatural craving for something sweet. The consumption of sugar starts the vicious circle which keeps on causing this unhealthy craving for sugar. Just as with other things causing addiction, this craving can

only be defeated successfully and permanently by complete abstinence from whatever causes the addiction.

As a fast and foolproof cure it is recommended:

To eliminate all food that has been sweetened with any kind of manufactured sugar and to replace it with naturally sweet food, such as fruit;

To use whole-grain products instead of refined wheat and rye flour. Their natural content of the vitamin B complex will assist in regulating the blood-sugar level.

Such an adjustment to correct nutrition in which all food containing ordinary sugar and refined flours is avoided will present a guaranteed protection from those criminal actions which are based on a faulty metabolism in connection with a disturbance of the blood sugar.

An Amazing Development

My curiosity aroused, I decided to write to Dr. Bruker, and to compliment him on his astute diagnosis. Amazingly, he replied that he had been helped about the low-sugar theory from my writings in *Prevention* magazine. Here is a copy of his letter:

> I was extremely happy to receive your letter, because I know about you for years. As early as in October, 1964, I received one thousand copies of your article "Sugar—The Curse of Civilization" from Mrs. Martha Schottnigg-Zinzenfels and I have distributed these copies to my patients.
>
> Your article is a marvelous supplement to my publications about sugar. I published a booklet, *Sugar and Health.* The publication was needed as a defense measure against the massive attacks and threats showered upon me by the sugar industry. Inasmuch as the sugar manufacturers claimed that there was nothing at all in the medical literature about the damaging effects of sugar, I felt it necessary to publish a compilation of all publications in order to answer the sugar manufacturers.
>
> Since that time, my position in my fight with the sugar manufacturers is a bit better. In the meantime, the *Arbeitskreis Gesundheitskunde* had been formed, and this organization is quite successful in the fight against refined sugar.
>
> I enclose a number of smaller publications about

this subject. I do hope that you will profit from them for your work on this subject.

Concerning the reactive hypoglycemia after the intake of sugar, your countryman Sandler has published a marvelous piece of research. It is his book: *Sonderernahrung verhuet Kinderlahmung* (Special Diet [or Nutrition] to Avoid Polio), published by H. G. Muller-Verlag, *Krailing bei Munchen,* 1959. Hypoglycemia (low blood sugar) not only causes psychological and mental changes, but, as Sandler points out, the infection with the poliomyelitis virus is only possible if the blood sugar level goes below 80 mg per cent temporarily. I don't know under which title his works are published in the U. S. I have written a short review of his book which I am sending to you, also.

I have no special experiences with your special theme, the relation between blood sugar and criminality. But, if you would like to receive more information in the area of sugar consumption, I shall be very glad to help you. At the same time, I would like to ask you to keep me informed about anything new in this area in the U.S.A.

With best regards.

Dr. Sandler

The book by Dr. Benjamin P. Sandler is entitled *Diet Prevents Polio* and was published by the Lee Foundation for Nutritional Research, of 2023 West Wisconsin Avenue, Milwaukee, Wisconsin. In this book Dr. Sandler tells of a polio epidemic in North Carolina which was stopped in its tracks when diet recommendations were broadcast through the press and radio and residents were terrified enough to follow them. "The week ending July 31," he tells us, "there were 304 more cases than in the corresponding week in 1946. Then a sudden change occurred. For the next six weeks 1948 fell behind 1946 by 1,581 cases." From then on the number of cases fell rapidly. And the manufacturers of soft drinks and ice cream alone probably lost millions of dollars in that one area.

Dr. Sandler suggests specific dietary practices to keep blood sugar at normal high levels. Eliminate all foods that contain sugar: soft drinks, ice cream, cakes, pastries, candy and so forth. Cut down on starchy foods, such as those made from white flour, and starchy vegetables. Eat plenty

of nonstarchy vegetables. Perhaps most important of all, eat plenty of protein foods: meat, fish, poultry, eggs.

The polio epidemics used to come in the summertime when children gorged on ice cream and sugarized soft drinks.

Dr. Stutte on Auto Accidents

Dr. Stutte, the doctor attached to the German court, sent me a copy of a paper on low blood sugar that has the following to say on the subject of traffic accidents:

> A person with hypoglycemia who is suddenly overcome in the thickest of the traffic in a large city with disorders of his vision or a state of weakness, a person with hypoglycemia (low blood sugar) who begins to stagger when motor disturbances occur or who reacts incorrectly as a result of loss of initiative or blurred consciousness, this person can easily provoke an accident in which he himself or another person can be the victim. Analogously, accidents can be caused at home, in the factory, and so forth.
>
> Hypoglycemic conditions threaten especial danger when they overcome the driver at the steering wheel, and—as is often the case—this person is not conscious of the fact that he is disturbed and continues to drive in spite of all his lack of industry in the task. When a car suddenly cuts out into the opposite lane and has a collision where there are good lighting conditions on a curve that can be seen well or, for that matter, even on a straight highway, one should not satisfy himself (assuming a negative result of the examination for blood alcohol) with the laconic statement "going too fast," but also think about the possibility of hypoglycemia having been the cause of the accident.
>
> An intensification of the investigation of the causes (in the area of medicine as well as in the area of technology) would probably be of essentially greater value for the prevention of accidents than the continual increase of punitory regulations.

A Girl Wrongly Advised

Dr. Donald Shriber, writing in *Modern Nutrition,* says:

> A girl of nineteen came to see me about a very distressing condition. Her gums would bleed spontaneously even when talking, which was quite embar-

rassing for her. She felt so miserable and tired that she wept practically throughout the first interview. She had spells of chronic fatigue and dizziness, and occasionally she had collapsed on the sidewalk. She had been constipated as long as she could remember and had to "take something" for relief. Headaches were quite frequent also, and she remarked that "she loaded up on aspirin." Upon questioning her about her food habits, I found that six weeks before she had been advised to eat five candy bars daily to correct her low blood sugar and dizziness. After about a week on this program one more difficulty was added to her misery—this spontaneous bleeding of the gums. In addition to that, the dizzy spells increased in severity. The blood chemistry examination showed a marked deviation from normal, and the blood sugar was *even lower than it had been six weeks prior.* A diet which contained no sugar or white flour products, was high in protein, was moderately low in fat, and contained approximately 250 grams of good starches was prescribed for her for two weeks. When she returned her gums had stopped bleeding; she was full of pep; her bowels were evacuating at least once daily without laxatives; and she had not had a headache since the third day of her diet. All blood tests were markedly improved, and I must add that her blood sugar which had been low (55 milligrams) had risen to 104 milligrams, which is quite normal.

Body, Mind and Sugar

The book of the above name by Dr. E. M. Abrahamson and A. W. Pezet (Holt and Company, New York, 1951) should be read by anyone interested in the subject of low blood sugar. It is a classic, and shows how the raising of the blood sugar level cured patients with allergies, hay fever, asthma, rheumatic fever, ulcers (real and imaginary), neuroses, alcoholism and even insanity.

But in the beginning of Dr. Abrahamson's experience he made the same mistake that others did, namely to feed sugar to raise the low blood-sugar level with disastrous results. Eventually through the writings of Dr. Seale Harris he learned the truth.

Unfortunately Dr. Abrahamson in his book does not include the effect of low blood sugar on criminal tendencies.

Conclusion

The foregoing would seem to indicate that every court of law, in fact every prison and reform school should have a resident M.D. with laboratory facilities to make blood-sugar tests. This should be required also in the public schools and colleges.

In the case of the schools the job probably could be done by a competent resident nurse. It would be interesting to study these school blood-sugar reports in connection with problem students.

CHAPTER SIX

Ivan the Terrible

THERE IS A biography, *Ivan the Terrible,* written by Jules Koslow, (Hill and Wang, N.Y., 1962). The story is a pitiful one for Koslow's scholarly yet highly readable documentation makes it clear that as a young boy Ivan had as much potentiality for great good as he did for evil. Had he understood the principles of nutrition, the entire course of the Russian monarchy might have been different, the revolution might never have happened, and there might be no Soviet menace today.

Orphaned at the age of eight, Ivan was raised under the resentful supervision of a group of nobles, who deliberately forced an abstemious regime on the boy as a humiliation. "They . . . fed us as though we were . . . the most wretched menials," Ivan wrote later. Although he did not know it, his menial diet was the best thing that could have happened to him. The menials ate cabbage soup with marrow bones and greens in it, buckwheat with onions and mushrooms, liver, heart and other discarded organ meats of animals.

On such a despised but highly nutritious diet, Ivan grew up a youth of strength and purpose. At the age of thirteen, in 1543, he summoned all his *boyars* (nobles) to court, mustered his loyal followers, skillfully stirred up feuds and schisms among those opposed to him, and managed to seize supreme authority from his enemies. This, in a boy

of thirteen, was a display of enormous ability and courage. Had Ivan maintained the state of health he was in at that time, the entire course of the Russian monarchy might have been set on a different and saner path.

Instead, however, he turned to gluttony. Haunted by the supposed "maltreatment" of his boyhood, he would daily eat and drink himself into a stupor of repletion of heavily spiced foods, pastries and candies, wines and vodka. Even when his religious inclinations sent him into retreat in a monastery, "The dining tables were loaded with the most exotic foods—roast swans, peacocks, sturgeon, and pastries of all kinds . . . Meals lasted for hours. . . . Mass sexual orgies were common, and usually accompanied a night of immoderate drinking and eating. . . ."

Alcohol, we know, drives the B-complex vitamins out of the system, producing mental instability, "nervous" states and low blood sugar which results in an increased craving for more alcohol. The kind of rich diet in which Ivan habitually indulged also sharply lowers the blood sugar level, in addition to the various ailments of heart, liver and other organs it can cause. At the age of forty, according to descriptions of him written at the time, Ivan looked "sinister and ferocious to the last degree." He was prematurely aged, the author says. He had a stooped carriage and scarcely ever held his head high. His eyes took on a wild look, reflecting the smoldering anger that seemed always to be burning within him. Torture, by methods too horrible to describe, was his favorite recreation. He forced his subjects to worship him as their "Little Father." Eternally suspicious, he exiled or killed his ministers, one after another. He had his henchmen kidnap pretty girls for him to ravish. His counselors, when they presumed to try to advise him, were accused of conspiracy and treason. He conducted purge after purge of the army and government officials, ordering executions by the thousands.

He murdered his son and heir because he dared to defend his wife against Ivan's charge that she was immodestly dressed. Then, in grief and remorse, he beat his head on the floor, prostrated himself before strangers and begged their forgiveness, wept, tore his clothes to shreds, and never recovered from the effects of his act. A few months later he died, at the age of fifty-one.

A Story About Abraham Lincoln

In the *World Journal Tribune* of February 12, 1967, there is an article headed "Honest Abe Had a Sweet Tooth," but the story as it is related by the nameless feature writer demonstrates just the opposite. It is a story that Lincoln related in one of the debates with Douglas.

> When we lived in Indiana, once in a while my mother used to get sorghum and ginger and make some gingerbread. It wasn't often and it was our biggest treat.
>
> One day I smelled gingerbread and came into the house to get my share while it was still hot. My mother had baked three gingerbread men. I took them out under a hickory tree to eat them. There was a family near us poorer than we were, and their boy came along as I sat down, "Abe," he said "gimme a man." I gave him one and he crammed it into his mouth in two bites, and looked at me while I was biting the legs off my first one.
>
> "Abe," he said, "give me that other'n." I wanted it myself, but I gave it to him and as it followed the first, I said to him. "You seem to like gingerbread." "Abe," he said, "I don't s'pose anybody on earth likes gingerbread better'n I do—and gets less'n I do."

Evidently Lincoln was not too passionately addicted to the gingerbread cakes, because he gave them up so easily. Secondly, I am not sure that any sugar was used by his mother in the recipe; the average consumption of sugar in those days was far less than ten pounds per person per year. Today it is about one hundred ten pounds.

Lincoln did not have ice cream very often, nor was he regularly exposed to shelves of commercial candy bars. There were no refined foods available, no white-bleached-flour breads, no synthesized T.V. dinners and such. Lincoln's diet when he was growing up consisted of coarse, natural, healthful foods.

Malnutrition and Crime

Some time ago I was in a grocery store on lower Second Avenue in Manhattan when two young men who looked like material from which hoodlums are drawn came in and purchased their lunch. Each one took a white bread loaf from which the so-called hero sandwiches are made

and a bottle of a cola drink. That was it! Bread and water with a lot of sugar in it.

The next day I read of the beating of a ninety-seven-year-old woman by a man who was said to be about from twenty to twenty-five. He beat her with her own cane and pushed her down a flight of stairs, snatching five dollars from her purse. He had fractured her skull; she suffered three broken ribs from her fall and died in a hospital some days later. I couldn't help comparing her assailant with those two boys I saw in that grocery store. You can get mentally sick from such a diet, and it is beginning to be believed that crime is a form of mental disease. We cannot blame that young murderer. We can only blame the official attitude that overlooks malnutrition as the most important cause of juvenile and adult delinquency. Some way must be found to see to it that all the hoodlum-type young people are taught what good nutrition can mean to them. It can be done! But it will never be, unless a beginning is made.

Why Sugar Is Bad

In a French health magazine called *La Vie Claire,* there appeared a series of articles entitled "White Sugar and Its Effects on the Body" by Dr. Victor Lorenc, which describe certain conditions caused by consuming white sugar. He states:

> Chronic excess of glucose in the blood is a very serious condition. A few dentists who are in the same time scientists have definitely noted that expulsive gingivitis (loss of teeth) accompanies chronic excess of sugar in the blood. Eye doctors also agree that this excess threatens the soundness of the sight.
>
> This sugar is a soluble food of which nothing slows down the delivery. It falls into the intestine as though from a waterspout, transforms itself in the twinkling of an eye into glucose, and overexcites the intestinal villi, which send it in mass to the liver. Now our liver has been conditioned by a thousand years in the past which knew nothing at all of the avalanches of glucose let loose by today's industrial sugar. Thus the liver cannot prevent a temporary excess of sugar in the blood. Each cell of the body will have to suffer for this defeat, including those of the liver itself.

Dr. Lorenc comments in an interesting manner on the effect of sugar on the nervous system. He says:

The few doctors who have compared a diet of industrial sugar with a good diet which is free of it have been able to observe the nervous irritation which sugar causes in children. Because they are more delicate, women and children show more clearly the effects of industrial sugar. With women, sugar causes pains during menstruation. Here is the case of Sophie Zaikowska. An old woman, she has been a vegetarian since 1902, but she used to take a daily consumption of approximately 100 grams of industrial sugar. At the age of thirty her menstruation became extremely painful. This discomfort disappeared completely with the suppression in 1911 of this "murderous food."

Since that time we have been able to observe many analogous cases. This fact ought to be known and spread abroad by workers with women. Sugar abstinence rids a woman of what is known as a "natural weakness," that is to say, of nervousness and incapacity to work which are often the result of difficult menstruation.

Sugar brings a brutally copious afflux of glucose to the liver, which stores as much of it as it can. Nevertheless, it cannot hold more than 150 grams of glycogen, so it transforms the excessive glycogen into fat globules, which are distributed a bit here and there throughout the body, especially in regions where the muscles do little work: over the stomach, over the hips, and under the chin. Fat is not to man's advantage; it is rather a source of trouble. Young people are generally thin, but with age the body defends itself less well. After thirty, the fattening effect of industrial sugar shows up more intensely with many people.

According to a study undertaken by the collaboration of forty-three American life insurance companies on three numerically equal groups of people over forty-five, the incidence of diabetes in these groups showed up as follows: In the group of very thin people there was one case, in the normal group there were five cases, and in the fat group there were two hundred twenty-seven."

CHAPTER SEVEN

Boy Threatens L.B.J.

I HAVE BEFORE me a newspaper account (the *Denison, Texas Herald,* January 1, 1967) of a boy, Granville Ray Stockton, twenty, who was jailed because he had written four letters threatening the lives of L. B. Johnson and other government officials.

Granville "dropped out of school the day he started junior high, after a trouble-ridden career at Golden Rule Elementary School, and has been committed to the state mental hospital three different times."

Sheriff Woody Blomton said that in the threat letters, signed with other names, there were fewer words misspelled and less rambling than you would expect.

Granville has a long and tempestuous record of conflict, and on occasions had shown physical violence towards his father.

"Butch (Granville) has never worked much," said his father. "He is physically able to work but he can't hold a job. He has had two or three jobs but always quit after a week or so and spent the money, mostly for candy."

Queen Elizabeth

In the entire history of the west, there is hardly to be found a more brilliant political intellect than that of Queen Elizabeth I of England. Hers was the political talent that overthrew the throne of Scotland and made that country a part of England. She skillfully avoided war with powerful Spain while chipping away at that country's power throughout the world. She kept France embroiled in internal disputes and almost singlehanded, it seems, raised England from a second-rate power to the greatest country in the world.

Yet the reign of Elizabeth was not a straight line of accomplishment but rather an alternation of periods of brilliance with other periods of great indecision and inability to take decisive action.

These periods of confusion and indecisiveness in Eliza-

beth's life have presented historians with a great paradox that they have been trying to explain for hundreds of years, without success. It seems to us, however, that we have found a significant clue in a U.S. Department of Agriculture pamphlet entitled *Sugar As Food.* In that pamphlet there occurs the sentence, "In 1598 Hentzer, a German traveler, ascribed Queen Elizabeth's blackness of teeth to her great use of sugar."

Poisonous Luxury

Sugar, in Queen Elizabeth's day, was one of the costliest of luxuries. Its cost at that time was the monetary equivalent of about twenty dollars a pound today. A great creator like Shakespeare could hardly have afforded to buy sugar or anything made of it until the days of his retirement as a rich landowner. In all of England it is doubtful whether there was another person than the Queen who could afford to eat so much sugar that her teeth were rotted by it.

Yet we are told that Elizabeth was such a great eater of sugar.

Of course, even with unlimited funds available, she could not get sugar all the time. Her access to the destructive sweet would have been limited by its availability. It came to England a few bags at a time in occasional cargos from the West Indies. So we may easily suppose the Queen did without sugar for long periods of time, and then when it was available, gorged on it.

It is the best explanation we have yet seen for the contradictory behavior and attitudes of this great queen.

Killings Galore

Having undermined her cousin Mary Stewart, who had a possible claim to the throne, Elizabeth then offered Mary refuge in England. She was kindly disposed toward the dethroned queen and sent her assurances of love and respect. Mary of Scotland lived at peace in England for many years until, for no apparent reason, Elizabeth changed toward her. The Queen grew suspicious of Mary, searched for plots against the throne that did not exist, and finally in a frenzied outburst of cruelty she had Mary beheaded, only to regret it bitterly the next day and forever after.

Was this the behavior of the brilliant mind that could

manipulate the thrones of Europe like checkers on a board? No, but very likely it was the behavior of a queen to whom Sir Francis Drake had brought copious supplies of sugar on his return from the New World.

Such episodes marked Elizabeth's entire career. She elevated the Earl of Leicester to be her prime minister, showered him with gifts, and then senselessly had him imprisoned and killed. Precisely the same happened to the Earl of Essex whom Elizabeth is believed to have loved at one time. When Elizabeth came to the throne she sincerely, and with political acumen, proclaimed an end to religious persecutions. Freedom of religion was one of her intellectual principles; yet sporadically during her reign she indulged in the persecution of Catholics and Puritans herself. The brilliant men of her period—Bacon, Shakespeare, Raleigh, Burghley and all the rest—practically worshiped her superb ability, yet they all lived in terror of the sudden, senseless moods during which she might destroy them.

Low Blood Sugar

To us it seems clear that Elizabeth was one of those unfortunate people who subject themselves to the metabolic paradox of creating a condition of low blood sugar by eating too much sugar. The mechanism is a simple one. An excess of sugar in the blood stimulates the pancreas to produce so much insulin that not only is the excess removed from the bloodstream but practically all the blood glucose. Such an unfortunate is left with insufficient glucose in the blood for the demands of the brain. Suspicion, depression, inability to think clearly are the commonest symptoms of such a condition. They probably explain why Queen Elizabeth was never able to decide who her own successor was to be and died without naming one.

She was a brilliant woman and her reign was a brilliant one. It was also needlessly cruel and sadistic and marked by spectacular errors of judgment.

What a reign it might have been if no one had ever brought sugar from the new world to destroy the teeth and corrupt the mind of one of the greatest women the world has ever known.

Sugar and Energy

There is a popular fallacy that the consumption of white

sugar will furnish energy. Here is a quotation from an article by Dr. Michael J. Walsh, a nutritionist, which appeared in the April, 1964, issue of *Modern Nutrition,* which shows the contrary:

> Acting on the false-to-fact identification that sugar is energy, people eat more and more sugar in the naïve belief that they are going to get more and more energy. Instead of more and more they are likely to get less and less energy—if the more and more sugar is in the form of the "concentrated, refined, fermentable carbohydrates," which includes sugar out of the sugar bowl, doughnuts, pastries, cookies, pies, cake, sweetened alcoholic beverages, sweetened processed cereals, syrup from canned fruits, etc., etc., etc. . . .

All of the above-named sweets are from Dr. Walsh's observations, the preferred foods of our youth. The reason why this kind of sugar reduces the energy is:

> . . . that they are not likely to be accompanied by sufficient quantities of other factors (such as vitamin B_1) , which are needed to ensure the completion of the intermediate stages of carbohydrate metabolism. For example, the diets containing excessive amounts of "concentrated, refined, fermentable carbohydrate" mixtures are invariably deficient in vitamin B_1. Vitamin B_1 is an essential part of the enzyme system which is responsible for completion of one of the stages of intermediate carbohydrate metabolism. If vitamin B_1 is lacking, this stage is not completed, energy fails to be released, and a by-product called pyruvic acid accumulates in tissue cells. A consequence of failure to complete the energy transformation is fatigue—the universal characteristic of every sick person.

In other words, it is a vicious cycle—you take sugar, you get a temporary surge of energy, but in a short time you want more sugar.

Athletes and Sugar

A man who was once an athlete and is now a minister, Rev. Gil Dodds, who I understand once held the record for the fastest indoor mile, recently addressed the children at the school my young granddaughter attends and cautioned them against the overconsumption of sweets. He told them that when he was in training, he severely eliminated sugar, because he found that it put his body out of

condition. He said he took extremely little sugar at other times. This could be an answer to those who believe that sugar is needed for energy.

A Dancer Shuns Sugar

Fedor Mausolff of Chicago is a seventeen-year-old dancer. How often have you heard that sugar is an absolute necessity for any kind of strenuous exercise? But listen:

> How do I get along without sugar? I still (after four years) find sugar tempting and good tasting. I am a tumbler and do ballet as a hobby. After a workout I have found it bad to take anything sweet. It makes my muscles become sore and lowers my endurance, I think. If I take any before a workout then I feel weak and discouraged. Also I do not sweat as easily as I do when no sugar is taken.

Dr. Adam Patrick

More evidence that sugar does not give energy for more than a few minutes is contained in an article by Adam Patrick, M.D. who said in the December 5, 1965, *Lancet*:

> The earliest symptom (of low blood sugar), as a rule, is a sudden feeling of tiredness and a desire to sit down. This is unlikely to have arisen within two and a half to three hours after the end of the meal. Two natural circumstances which hasten the fall of the blood sugar are some form of exertion and some kind of excitement. The two may be combined, as in active games. A walk against a strong wind on a cold day is frequently a cause. The onset of fatigue is commonly sudden, within a few seconds.

Dr. Sidney A. Portis

Dr. Sidney A. Portis of the University of Chicago believes that a diet *low in sugar* will reduce fatigue, according to the *Journal of the American Medical Association,* Vol. 142, 1950. Dr. Portis, a nerve and mental disease specialist, says that an excess of emotion stimulates the pancreas, resulting in low blood sugar.

Sugar and Energy

According to the *Science News Letter* of October 30, 1954, Dr. Reuben Andres, a researcher of Johns Hopkins University, perfected a technique for measuring blood through the forearm, so that he could determine what sub-

stances are carried by the blood to the muscles to give them energy. The general idea is that *oxygen* is carried by the blood to the muscules to give them energy. But up to this time scientists believed that this oxygen came only from the breakdown of sugar. Dr. Andres' research, however, showed that other chemicals furnished far more energy than the oxygen from sugar breakdown.

Quick Energy Fallacy

The following is from *Consumer Bulletin,* August, 1961:

> The "quick energy" that comes from carbohydrates and is so much praised in advertising of the sugar interests is short-lived. The malnourished child who is fed much sugar will quickly lose interest in activity after his bottle of a soft drink or an ice cream soda and soon sink back again into his prior passive state.

Dr. Stare Defies the Facts

In spite of the foregoing evidence Dr. Stare of Harvard, a man who is looked to for health guidance by both the public and the medical profession, said in the *Detroit Free Press* of June 5, 1961:

> In answer to a question, "Would overeating of sweets cause lack of energy?" I wrote that it would not. . . . [He makes an exception in the case of functional hyperinsulinsim.] In a well person, "overeating" of sweets or for that matter, protein or fat, will not cause lack of energy. . . . Sweets and other carbohydrates certainly are part of good, balanced nutrition for the average individual.

In other words, Dr. Stare states that any kind of sugar (including white sugar) should be part of a balanced diet. He advises people to consume white sugar.

Dr. Stare Received Award

In an A.M.A. news release, April 14, 1961, appears the following:

> Chicago—The Board of Trustees of the American Medical Association announced today that Fredrick J. Stare, M.D., Ph.D., chairman of the Department of Nutrition at Harvard University since its origin in 1942, had been selected to receive the 1961 Joseph Goldenberger Award for outstanding work in the field of clinical nutrition.

The award consists of a commemorative plaque and $1,000, which will be presented to Dr. Stare before the House of Delegates on the opening day of the American Medical Association's annual meeting in New York, Monday, June 26. At 11:30 on the following day, Dr. Stare will deliver the annual Goldberger lecture in Room B at the Coliseum.

CHAPTER EIGHT

Russia

MY SON ROBERT, at age thirty-two was part of a four-man American team that came out first in the 1962 International Skeet Shooting (Clay Pigeon) competition at Cairo, Egypt. This was the first time since these competitions began about eight years ago that the American team won, and in doing so it also broke the world's record for skeet shooting. Robert tied for first place on the American team. There was a good deal of fraternization between teams, and Bob learned a lot from the Russians.

He found that they brought with them from Russia practically all the food they ate, and that their diet was quite primitive compared to ours, with far less sugar consumption as part of it. For example, chewing gum is unknown in Russia, and a Russian substitute for candy is sunflower seeds. The Russians evidently understand that diet has a great deal to do with the ability of their team to shoot, that a good diet feeds the brain better, giving more mental alertness, better coordination of body functions, a healthier nervous system that can more efficiently transmit messages from the brain to the trigger finger.

And Bob is perhaps even more superior than the Russians in this respect. Since the age of thirteen he has been eating organically produced food from our farm. Since 1951 he has been taking all the vitamins and minerals of the *Prevention* system. For a long time he has shunned sugar, bread, cakes, candies, and soft drinks. Is it possible that Bob's shooting ability has come about because of this? At the age of about twenty-five Bob was already in full charge of the admin-

istration of the Rodale Press with its more than one hundred employees, conducting departments in our magazines and writing authoritative, technical articles. At that age he also went on the lecture platform, delivering talks to organic gardening and health clubs, to Rotary groups, Kiwanis, etc. I choose to think that Bob's nutrition has a great deal to do with his mental superiority.

P.S.: On Monday, May 29, 1967, Bob came out first in the Canadian International Skeet Championship, held in conjunction with Expo '67. He shot 196 out of 200. The second man did 186 out of 200. The *Allentown Call* said, "The shoot was held in a fifteen-mile-an-hour wind, but it didn't seem to bother Rodale."

Gayelord Hauser

When Gayelord Hauser went to Russia in 1958 he wrote, "The Russian diet is definitely not as sophisticated or refined as our American diets, which may partly account for their great vitality. Who knows? This simple diet may be one of their secret weapons?" The Russian food factories are using a minimum of chemicals. There is less processing. Hauser continues, "Russian scientists are doing a lot of vitamin research. They recommend triple doses of vitamin C, which they extract from rose hips."

In 1961 Sergeant Etienne Elfer, a physical training instructor at Parris Island, said with regard to Marine recruits, "There are men coming through who haven't done a lick of work in their lives. . . . It is just a sorry mess to see some of them." Commenting on this, the *New York Herald Tribune* (May 31, 1961) said, "While many Americans sit back as spectators, people under communism work hard at their play. Russians are trained and drilled early and long in calisthenics. Under communism, play has but one purpose, to improve the fitness of the citizen for the collective fitness of the state."

Do our juvenile delinquents get such training?

Dr. Senn in Russia

There was an article in *McCall's* for October, 1958, written by Dr. Milton J. E. Senn, director of Yale University Child Study Center, who, on a tour of Russia, was amazed by the wonderful behavior of Russian children. He found them "good-humored, easy going, carefree and friendly.

Yet they are remarkably well-behaved. They are not given to yelling, fighting or breaking things. They play together in notable harmony. . . . They are warm, spontaneous, polite and generous. . . . It is impossible, from one's hiding place on the park bench, to keep from falling in love with them."

This doctor went to Russia, he says, expecting the worst. What he found surprised and fascinated him. He saw these bright and affectionate youngsters, he says, as the hope of the world. However, he does not seem to be aware that the diets of these children contain a minimum of ice cream, candy, cakes and soft drinks. In Russia, a chocolate bar is prohibitive in cost. Compare the diet of our juvenile delinquents!

Russia has not only caught up to us in health, but has outdistanced us. Here are the mortality figures:

	U.S.	*Russia*
1950	9.6	9.6
1955	9.3	8.4
1957	9.6	
1958	9.5	8.2
1959	9.4	
1960	9.5	7.4

And yet our doctors go over to Russia and laugh at their "primitive" medical procedures. The Russian doctors put a far greater reliance on the taking of vitamins than do our medical men.

Juvenile Delinquency in Russia

In the September 17, 1966, issue of *Science News* there is a description of a report of Dr. Paul Hollander to the American Sociological Association meeting in Miami. Juvenile delinquency, he says, is now becoming a problem in Russia, but the delinquency of young Russians probably is due to boredom.

Dr. Hollander thinks that the main reason for this is "life-long membership in one huge, bureaucratic organization that concerns itself with every detail of life. Such routinization leaves little room for chance, luck, imagination or excitement."

But, he says, "Compared with American juvenile delinquency, the Soviet [type] appears on the whole to be more tame and more underdeveloped. . . ."

In other words, drunkenness rather than violence is the problem.

I feel also that Russia is being influenced by American ways—its dances and possibly its diet. On a transatlantic plane where my wife and I were making a crossing a few years ago, there were six American girls who were going to Russia to introduce Pepsi-Cola.

Reduction of Crime in Russia

In the *St. Louis Post Dispatch,* November 28, 1965 (*N.Y. Times* Service Item), there is a quotation from a Russian official, Vasily I. Konotop.

> Konotop said that although the overall crime rate (in Russia as a whole) had declined somewhat in the last few years, there had been an increase of juvenile delinquency in the Moscow region. He attributed the situation to the negligence of the authorities in pressing political indoctrination, the irresponsibility of parents and general moral dissoluteness. The party official noted that more than 80 per cent of all youth crime was committed in a state of intoxication.

A Russian on Sugar

Alexei A. Pokrovsky, a forty-nine-year-old Russian scientist who does handstands on chairs, is an expert on nutrition and a director of the Institute of Nutrition of the Soviet Academy of Medical Science.

He is constantly preaching good nutrition on radio, in books, lectures, etc. One of his pet ideas: Sweets are the most dangerous enemy to women.

CHAPTER NINE

Girl Raped in Church

In the *San Francisco Examiner,* April 27, 1967, a case is described of a sixteen-year-old girl who was raped in a Catholic church. She had gone there to burn a candle for her brother who was in Vietnam. She described her attacker as a young man between twenty-five and thirty whose face was scarred by acne.

There is much medical evidence that acne is caused by an over-refined diet, and usually with the over-consumption of artificial sugar.

Boy in Elevator

Somewhere back in 1961 I wrote of a sixteen-year-old boy who fatally shot a seventy-six-year-old man as he was going to his apartment in an elevator. Prior to the shooting the boy had been given two dollars to buy shoes, but instead had bought candy.

Now two dollars worth of candy, eaten all at once and suddenly getting into the intestinal system of a susceptible individual, will cause the blood sugar to plunge downward. This quick change confuses a person and distorts his ability to make an intelligent decision. The fact of the matter was that the boy had a need of two dollars to buy shoes, because he had spent his money for candy. So he shot an old man.

The Ford Foundation

"The Ford Foundation," according to *The Lancet*, Sept. 24, 1966, "has made a grant of $320,000 over four years, to support a joint study in criminal justice and criminology at the School of Law, Columbia University, New York, and at the Institute of Criminology, University of Cambridge. It will provide fellowships for three graduates from Columbia to study at Cambridge and for three graduates from Cambridge to study at Columbia. It will also allow an exchange of faculty members."

I had completely overlooked the law schools which are supposed to study criminology. Lawyers are not doctors, therefore they would not be prejudiced as far as nutrition is concerned. To the average doctor, at this moment, nutrition as a specific medicine is a dirty word, a red flag. But a lawyer would have a logical viewpoint. I am sure that the average lawyer would not permit the fact to influence him, that if good nutrition will reduce crime it might reduce his legal work.

I feel that the law through its lawyers ought to make an independent study of crime as it might be affected by nutrition.

Dr. James J. MacMillan's Experiment

Writing in *The Dental Digest* (April, 1955) Dr. James J. MacMillan told of an experiment he worked out on his

patients. It called for the child to eat the regular family meals, with desserts at the proper place, but not to be eaten until the preceding food had been eaten.

But at no time were the children to be allowed candy or soft drinks.

Dr. MacMillan's diet had some interesting effects. First of all, the parents cooperated in keeping sweets away from their children. This was attributed to the definite character of the order: no candy or soft drinks. Parents knew exactly what to do. There was no time at which the question of how much was in doubt. There was a solid rule.

Another interesting thing happened with the children. The ones on this regime did not particularly care for desserts. It was more common for them to refuse dessert than to eat it. Dr. MacMillan was led by this to wonder if eating sweets is not actually an acquired taste—a training to eat a type of food which is actually unpleasant at first. The children had no desire for soda and candy because the taste had not been created.

Weston A. Price Saw It in the '30's

Dr. Weston A. Price was a research dentist in Cleveland, Ohio, who traveled among primitive peoples all over the world in the '30's in search of the answer, or cause of their usual good health. And he found it—nutrition! He wrote a book of five hundred pages with hundreds of photographs, and it was published by Paul B. Hoeber in 1942. It is now out of print. His basic finding was that peoples who lived under primitive conditions had excellent teeth and wonderful general health, but that when they migrated to civilized places and ate the refined civilized foods the health of their teeth declined, along with that of their whole body.

While Price, being a dentist, was mainly interested in teeth, he was scientific enough to know that the teeth were part of the body as a whole and that there was a relation between dental and general health. He studied the eyes, the hearing apparatus, the lungs, the heart and the reproductive systems. But what interests me most is that he also studied the mental health of these primitives.

Dr. Price studied the Scotch, the Austrians, the Eskimos, South Sea Islanders, African natives, New Zealanders and many others. In each case, he found that natives who ate a diet composed of natural, unprocessed foods, which were

indigenous to their own environment, were the healthiest physically and mentally. As soon as imported, processed, or devitalized foods were introduced as the result of increased trade and the development of more sophisticated tastes, the physical development of the people began to deteriorate perceptibly within a single generation.

Dr. Price was especially impressed by the absence of crime and delinquency in primitive societies. In each there were an inborn integrity in the people and a tradition of respect for the older members of the tribe. This deference to age was shown in one tribe by the way in which the younger hunters would leave the more accessible game and fish for the less agile of the group, knowing they would be less likely to be successful where greater effort was involved.

In none of the groups studied before they were touched by outside dietary influences was there any need for—or even knowledge of—jails or police measures. Unfortunately, this picture changed in direct proportion to the acceptance by the primitives of imported, refined foods.

Here are a few excerpts from Price's book that are germane to our subject:

> Talking about the Masai in Africa who live on milk and blood, with some meat, and with a varying percentage of vegetable foods, it was interesting to observe that in every instance these cattle people dominated the surrounding tribes (large consumers of cereals). The Masai were characterized by superb physical development, great bravery and a mental acumen that made it possible for them to dominate because of their superior intelligence.
>
> Regarding the Bugunda Tribe of Uganda, Uganda has been called the Garden of Eden of Africa because of its abundance of fresh water fish and animal life. The natives are thrifty and mentally superior to those of most other districts. . . .
>
> The Maori men have great physical endurance and good minds. Many fine lawyers and government executives are Maori. The breakdown of these people comes when they depart from their native foods of modern civilization, foods consisting largely of white flour, sweetened goods, syrup and canned goods.

American Missionaries

The intense American desire to make money at any cost is sending our corporate-dollar missionaries all over the world to spread American ideas merely for the mercenary effect. I saw an article in the *New York Times* (Dec. 15, 1957) entitled "Pepsi Hits All the Spots It Can," and in it there is shown a photograph of a jungle drummer with the Pepsi-Cola insignia on his drum. The caption under the picture is: "Business is being drummed up in such far-off places as Leopoldville in Belgian Congo." The article says that in Ghana there is a $280,000 Pepsi-Cola plant that is expected to sell 500,000 cases a year. Mr. Desch, a company representative, says, "Our philosophy is that no matter what race, color or creed, if an idea brings sales results in the United States, it can be adapted to the areas we are working in."

True! These jungle people will eat or drink anything that tastes good, regardless of their traditional dietary habits. Their eating has been primitive, and incidentally healthful, only because that kind of food has been the only thing available to them. This matter of instinct in such things is all right for the classroom. It does not work in practice, which reminds me of an experiment Dr. Robert Mick of Laurel Springs, New Jersey, made with some white rats in order to determine whether a rat is guided by its instinct in deciding what it will eat. He gave them a choice of either water or a cola drink; they chose eight bottles of cola to every one of water.

Admiral Richard E. Byrd brought 2½ tons of candy to the South Pole on one of his expeditions.

I wonder how much of the recent violence in the political activities in Africa is due to the modernization of the diets of the natives.

Scotland Yard

A few years ago I made a quick trip to London, England, to go to the Electrical Exhibition and to see how our Berkhamsted office is doing. In England we publish a digest of *Prevention*. We had a little extra time, so a friend arranged for my wife and me to go through Scotland Yard. In discussing the matter with the officer who was giving us the tour, I asked whether the Yard was doing

anything about studying nutrition as possibly being one of the causes of crime.

His reply was startling. Not only is the Yard not concerned with nutrition; it isn't even doing anything in the field of studying causes of crime.

"When a crime is committed, then we come in," he said.

But, he added, researchers are studying the causes of crime at the University of Cambridge, and if I would take the matter up with them I would find out what I was after. So I wrote to them when I got home and here is the reply I received:

> Dear Mr. Rodale,
>
> Thank you for your letter of April 21st, raising the question of nutrition as a possible cause of crime.
>
> It is not an aspect that has been studied by this Institute, and our present research programme makes it unlikely that we will be considering it, at least for some considerable time.
>
> We are most grateful to you, however, for your interest in raising the matter.
>
> Yours sincerely,
> L. Radzinowicz, L.L.D.
> Wolfson Professor of Criminology

No comment!

W. Coda Martin, M.D.

In an address at the annual meeting of the Friends of the Land, at Chicago, Illinois, June 26, 1956, Dr. W. Coda Martin said:

> National sugar consumption is one hundred pounds per year per person, or an average of five hundred calories per day. These are known as empty calories. They cannot be properly metabolized in the body because the required vitamin-and-mineral catalysts were removed during refinement. This interference with the enzyme system of metabolism results in the production of toxic metabolites. Tests have shown that these metabolites from incomplete carbohydrate metabolism interfere with cellular oxidation which results in the formation of abnormal cells. This is the beginning of tissue pathology.

Naughty Girls Cured

A most interesting example of the effect of a healthy diet

on character appeared in the *London Sunday Chronicle* of May 3, 1953, under the heading, "Diet Makes Naughty Girls Good." It follows:

> Can diet cut juvenile delinquency?
>
> A just-completed survey of seventeen maladjusted or delinquent girls between the ages of eleven and fifteen in a Camberwell (London) Salvation Army hostel seems to prove it can.
>
> Previously the girls lived on the poorest possible type of meal: white bread and margarine, cheap jam, lots of sweet tea, tinned and processed meats.
>
> Fish and chips had been one of their most nutritious meals.
>
> But a year ago in Springfield Lodge their diet was changed to raw fruit, nuts, vegetables, salads, whole wheat bread, dates, prunes, figs, honey, cheese, meat, eggs, crushed wheat, and oatmeal.
>
> And this is what happened:
>
> They quickly became less aggressive and less quarrelsome, bad habits seemed to disappear, "problem children" became less of a problem, and the bored ones lost their boredom.
>
> Physically, they improved almost beyond recognition.
>
> Major Hudson, the warden, told me last night: "It is amazing to see the difference in their complexions, general brightness, and poise. But the difference in their behavior is the most significant.
>
> "The part the diet has played in their personalities is undeniable."

Francis Pottenger, M.D.

Dr. Pottenger comes out directly with the statement that malnutrition is the chief cause of juvenile delinquency. I am quoting from *The Springfield* (Ill.) *Daily News and Leader* (no date available):

> "Even your telephone tells the story of man's malnutrition," Dr. Francis Pottenger, Jr., specialist in child diseases from Monrovia, California, told a public forum at Farmers Auditorium in the county courthouse last night.
>
> The new telephone has been designed three-fourths of an inch shorter because of the shortening of man's jaw and lower face in the last generation. That, contended Dr. Pottenger, is the result of malnutrition that has become almost universal with the American people.

Doctor Pottenger was one of the speakers at the forum which marked the end of the first day of a two-day conference of nutritionists and soils specialists from over the nation in Springfield.

But that is not the worst of the picture Doctor Pottenger drew. The terrible effect, he said, is on the younger generation—today's youth. Eighty-five to ninety per cent of today's crop of children need their teeth straightened because they don't get the proper food.

And, according to recent medical studies, the shortening of the jaw in human growth also brings a corresponding shortening of the lower part of the brain. The result, Doctor Pottenger said, is that a youth does not mature properly—never becomes quite sexually mature.

"If I were to name the chief cause of juvenile delinquency and of the growing crime rate, "Doctor Pottenger said," I would say it was malnutrition."

Colombia, South America

An example of a whole nation whose crime rate is probably affected by the overuse of sugar is Colombia, South America. My information comes from the book *Inside South America* by John Gunther.

Gunther says, "Colombia has a fantastically sweet tooth; its consumption of sugar is said to be the highest in the world, about 40 per cent higher per capita than in the United States. Partly this is caused by the enormous popularity of a sugar-water concoction known as *agua de panela,* which many citizens drink as a kind of nostrum." They think it is health-producing.

Colombia has resources extremely rich, yet it has recently been close to bankruptcy; it has been dominated by long periods of violence. Lawlessness is endemic in the streets of its capital, Bogota. The average spectator on entering the football grounds is pickpocketed. Colombia's death rate is the highest in South America.

Colombia is a country full of violence . . . "village pitted against village, clan against clan, family against family. . . . Rural gangs descend on remote villages to raid crops and get food."

There is a criminal group called the *violencia* which in twenty years have been responsible for killing between two and three thousand people. Gunther relates a warning by

a young American man given to his wife at their hotel, in regard to a bracelet and wristwatch she was wearing. "Don't go out on the streets with any jewelry that can be snatched. The things will tear them off you in broad daylight." They were warned not to walk in the streets after dark, and never to take any taxi not directly provided by the hotel. An epidemic of kidnappings was also going on.

He said that householders in fashionable areas had their own guards.

Read Gunther's book and you will see many more examples of a crime situation gone out of hand.

Is this what we are coming to?

CHAPTER TEN

Divorce on Increase

THE STATISTICS SHOW that one out of every four marriages in this country ends in divorce, and the divorce rate is increasing every year.

To my way of thinking divorce is a crime, and perhaps the same reason that is responsible for the increase in delinquency, namely low blood sugar, is also behind the increase in the divorce rate. With low blood sugar a person is highly nervous, ready to argue unreasonably, to spring at one's throat, literally. Imagine a husband and a wife, each with a severe low-blood-sugar condition, living in close quarters where it is easy to step on each others' toes, and you have candidates for the divorce court.

Dr. P. E. Formica of Old Bridge, New Jersey, experimented with one hundred cases of people who have been complaining of headache, insomnia, back pain, boredom and *marital* difficulties. To cure them of their "nervous" condition he gave them a potassium and magnesium compound.

At the end of the trial period, 87 per cent of the subjects responded favorably. Dr. Formica, writing in *Current Therapeutic Research* (March, 1962) said, "The patients reported that in four to ten days (54 per cent by the seventh day) they became aware of a definite increase in

energy and strength. The change was startling in the patients who responded. They become alert, cheerful, animated and energetic and walked with a lively step." And marital difficulties also decreased.

This research is proof that in many cases of possible divorce one or both partners are sick, on the mental side, albeit only slightly in the average case. Incidentally, potassium and magnesium are part of the nutrition of a person. Another more important part of nutrition is sugar, and if Dr. Formica had had his patients eliminate white sugar, the results might have been even more pronounced.

Divorce Can Be Prevented by Nutrition

Here is something I wrote in 1955:

> If I was a divorce-court judge I would attempt to convince the discordant couple to hold up the proceedings while they went through a trial nutritional period of a year or two. I would outline the vitamins they were to take and the dietary errors that they were to correct. I would have them mail me statements of daily food eaten and give them interim suggestions and corrections. I will wager that I could save at least half of these rickety marriages and put them on a solid foundation by this nutritional approach to the problem, although five years would be a more adequate trial period.

Imagine my surprise when I found that a few years later a doctor had been able to prevent divorce by doing the very thing I had suggested. Her name is Cecelia Rosenfeld, M.D., of Los Angeles, California.

She had an idea that many of her patients who were at the point of divorce were that way because they had become emotional "cases" on account of poor nutrition. She began to work on them with a great deal of success and wrote about it in a medical journal called *New Medical Materia* (August, 1962). I will reproduce her article herewith:

Nutritional Guidance Can Forestall Broken Marriages

By Cecelia Rosenfeld, M.D.

Broken marriages have many causes. When quarreling couples appear before a psychiatrist or marriage counselor, they are duly encouraged to discuss their

emotional, psychological, and sexual problems. However, one of the prime causes of marital discord—nutritional deficiency—is too often overlooked.

In my own practice, I have found that a surprising number of "broken marriage" spouses suffered from blood-sugar imbalance. Many of these husbands and wives showed symptoms of irritability, violent temper, abnormal sensitivity, and extreme fatigue. In most cases, there was no evidence of organic disease. Corrective nutritional guidance dispelled these unpleasant symptoms for many spouses and in the process often bolstered their crumbling marriages.

Of course, nutritional deficiencies are not confined to married persons. Bachelors, spinsters, children—anyone—can become physically and emotionally ill because of poor nutrition. But it is in the marriage situation, where the emotional outlook of husband and wife are so intimately connected, that truculence and short temper most often "rub the wrong way."

As these symptoms seem to indicate a need for investigation in the area of hypoglycemia (low blood sugar), a four-hour glucose tolerance test is usually recommended.

The glucose tolerance tests generally reveal a pattern of abnormal fluctuations in the glucose (sugar) levels. Of greatest significance is the relatively precipitous drop in the glucose level.

The symptoms are most pronounced at the low point. It is not so much the level as the rapid rate of the drop within the test period. The glucose curve often points up which gland is involved in the endocrine imbalances.

Briefly, it may be concluded that many of these symptoms have their origin in a metabolic imbalance. This imbalance, in turn, may be caused by ingestion of excessive amounts of carbohydrates or alcohol.

A sugar imbalance may cause emotional stress. On the other hand, emotional stress may cause a sugar imbalance.

Whatever the initial cause of the disturbance, patients showing such nutritional deficiency should be placed on a corrective diet. The essential features of this diet are low carbohydrate ingestion and emphasis on proteins and fats.

They should be instructed to omit sugar in all

forms—soft drinks, pastry, ice cream, or the like. In most instances, patients should be advised to eat six light meals per day in order to maintain a stable glucose level. Vegetables and fruit provide sufficient carbohydrates to maintain nutritional balance.

Within a few weeks after starting on their new diet, an impressive majority of my "broken marriage" patients showed a positive response. Here are two typical examples:

Case 1: Mrs. R. L., a thirty-four-year-old secretary, was referred to me by a psychoanalyst. Her symptoms included exhaustion, fatigue, exceedingly poor concentration, and chronic depression. As a result of these symptoms, her home life had deteriorated and she was separated from her husband.

Mrs. R. L. had been taking two grains of thyroid daily for a number of years. After six weeks on a nutritional regimen, the thyroid dosage was reduced to one grain, and eventually reduced even further.

Four months later, improvement was so marked that Mrs. R. L. resumed post-graduate work which had been discontinued because of her condition. She is living with her husband again, and both report that the marriage situation is harmonious.

Case 2: Mr. T. E., a fifty-three-year-old business executive, was referred by a marriage counseling service. He had been suffering from severe migraine headaches for ten years—especially severe during the night. During these years, the patient had been treated at two major clinics and under private care. According to Mr. T. E.: "Every night, I swallowed an assortment of pills to ease the pain."

Mr. T. E.'s wife had complained that his chronic irritability made him impossible to live with—she had begun divorce proceedings.

The patient was advised to discontinue all medication, and was given a nutritional program instead. In two months, the headaches had disappeared.

Mr. T. E. and his wife have since taken a six-month trip around the world. His wife's statement at the conclusion of treatment was: "He has become an energetic companion and a good husband."

Work with Alcoholics

By Cecelia Rosenfeld, M.D.

My work in nutrition began fourteen years ago and

grew out of my experience, common to opthalmologists, in observing certain systemic disease through eye examinations.

At that time, there were few medical practitioners specializing in nutritional guidance, and I felt an obligation to pursue studies in biochemistry and endocrinology.

When I applied these studies to my practice, I found that not only eye conditions were improved—patients also reported improvement in such conditions as hypertension, heart ailments, gastro-intestinal dysfunctions, and obesity.

One of the most gratifying concomitant benefits of nutritional guidance is that, in alcoholics, the craving for liquor often diminishes.

For example, Mrs. L. T., a twenty-eight-year-old housewife, was referred to me by a psychoanalyst with the information that alcoholism might be the basis for her marriage troubles. Both Mrs. L. T. and her husband were described as basically intelligent and responsible individuals.

The patient apparently was a victim of the so-called "obligations" of her social circle, which include much drinking of hard liquor.

Mrs. L. T.'s condition when intoxicated was severely affecting her husband's business and social relationships. The husband also reported that their two young children were exhibiting intense negative reactions to the situation.

After five weeks of nutritional guidance, the patient reported that she felt wonderful and was able to resume her domestic responsibilities. Except for occasional lapses, the patient now restricts herself to one glass of wine per day.

Unlike other therapies which are directed primarily to the specific conditions, nutritional guidance is a form of preventive medicine. When a person achieves sound nutritional habits, he gains a life-long pattern for healthful living.

A Government Study of Divorce

Before leaving this subject I would like to mention that a few years ago the U.S. Public Health Service made a grant of $33,101, described as follows:

A test of the husband-wife relationship. The aim

is to develop a diagnostic pictorial test of both intrapersonal and interpersonal aspects of the role relationship of husband and wife. The test should be sensitive to the perceptions of actual behavior and norms and to the consonance perceived between these.

I am not making any comment!

Dr. Sam E. Roberts

There is in publication now, by my company, Rodale Books, Inc., a book by the late Sam E. Roberts, M.D. called *Exhaustion, Causes and Treatment*, with an introduction by the famous Morris Fishbein, M.D. Dr. Roberts was Emeritus Professor of the University of Kansas School of Medicine and an honorary member of its research hospital.

It is a remarkable book coming from such a conservative source, because the main theme is that exhaustion and a host of other disease conditions come from hypoglycemia, or low blood sugar.

I will quote a few of his references to marital difficulties and divorce.

> Any married couple contemplating a divorce should take the low-blood-sugar test if one or the other, or both, are exhausted, or their dispositions combative or violent. If the situation has existed for months or years, they probably have not enjoyed each other as man and wife—"just too tired." The treatment should extend over two or three months. This is a sort of Taft-Hartley cooling-off period.

Another Divorce Prevented

Dr. Roberts describes a young couple in their early forties who were a depressed, dejected-looking twosome. "The wife's eyes were dull and her eyelids swollen. He was exhausted and disinterested; his buttocks were covered with hives."

She had a history of allergies and during the last two years had suffered from exhaustion and mental depression. Her husband noticed that at times she lost her mental alertness and occasionally was even confused.

He, an electrical engineer, also had a history of allergy, and was troubled with bursitis, chronic sore throat, stomach pains, prostatitis, kidney trouble, etc. The doctors could do nothing for either of them.

When they came to Dr. Roberts he found them to have low blood sugar.

They were each given the low-sugar diet with other nutritional directions.

> The first week they showed little progress. After another . . . he was holding her hand as they left the office (the first show of affection they had displayed); they had been "just too tired" to be interested in each other. When they returned Monday morning they looked so well and happy they were asked if they were having another honeymoon in Kansas City, and he replied in a loud voice, "Yes, we sure are!" She dropped her eyelids and smiled.

There are a few other references in Dr. Roberts' book to marital troubles being related to a diet of highly refined sugary foods. He found that the cure comes from reversing the diet.

Dr. Joseph Wilder on Divorce

In the book *Handbook of Correctional Psychology,* by Lindner and Seliger, there is a chapter by Joseph Wilder, M.D., entitled "Sugar Metabolism in its Relation to Criminology." In it he gives a list compiled from medical literature up to 1940 of crimes and infractions of the law committed either under the influence of an overcharge of insulin, which reduces the blood sugar, or in a state of spontaneous blood sugar.

The list includes "The frequent conflicts in matrimonial relationship arising from attacks of hypoglycemia."

Are Suicide and Divorce Related?

If you look beneath the surface you find a surprising similarity between the problems underlying suicide and those that cause divorces. Dr. Sam Roberts states, "Any person who threatens suicide should take the test (low blood sugar). Estimates indicate that in Canada and the U.S., fifty-five persons commit suicide each day. Some might be saved."

In 1966, according to an authority, nine thousand attempts at suicide will be made on the campus, and about one thousand will succeed." Reason given: "A 'pressure-cooker' emotional atmosphere on the campus." If you've ever seen college students eat and drink, and if you've read

this book thus far, you will agree that a scientifically fed student is a student who can thumb his nose at campus pressures.

In the meantime the authorities talk about broken homes, love affairs, financial problems, rejection by parents, and conflicts over behavioral problems which "progressively serve to isolate the adolescent from meaningful social relationships." If we could only isolate these adolescents from cokes, ice cream, candy, doughnuts and a lot of other refined carbohydrate foods, we would see adolescents with whom it would be a pleasure to be associated.

You will recall under the sixth item in Chapter Three, "Criminal Tendencies Affected by Nutrition," a letter from Dorothy M. Brown, quoting a doctor who had studied two hundred suicides, who found that in 90 percent of the cases the victim suffered with acidosis. Sugar, bread, cakes, and cereals are acid-forming foods.

Incidentally, as I write this at San Francisco, March 14, 1967, something comes to mind which we heard last night on the T.V. Thus far in the last two weeks of February and the first two weeks of March, 1967, five students have died in jumps out of windows on the Berkeley campus.

Now they are going to increase the patrols on the campus grounds to keep a sharp lookout for students who have a suicide look in their eyes.

Will the trend get worse? Considering all the strange, hippy, beatnick activities in and around the Berkeley campus, will these youngsters begin to jump out of windows two abreast, just for kicks?

Denmark's Suicide Rate

Denmark has the highest suicide rate in the world. There are many causes, but at the bottom of it, could the average Dane be a large consumer of sugar?

Let's look at the figures of average per capita sugar consumption of some countries for the year 1963:

Japan	43.2 lbs.
Spain	43.9
Italy	57.8
West Germany	73.6
France	75.2
U.S.	106.3
United Kingdom	122.2
Denmark	123.1

Amazing?

It should be required to test the blood sugar of every attempted but aborted suicide.

Actually and eventually, there should be a law that every person must get a free sugar test once a year.

CHAPTER ELEVEN

The Case of P.J.

IN THE BOOK *Body, Mind and Sugar* by Dr. Abrahamson there is related the case of P.J., a woman of forty-eight who had suffered from claustrophobia and loss of memory (among other things) for fifteen years. She went through psychoanalysis, and although Dr. Abrahamson later found her suffering from low blood sugar, the psychiatrist gave her shock treatments and injections of insulin which lowered still further her blood sugar. She became worse and lost her desire to live. She tried two more psychiatrists with no results. Then she found Dr. Abrahamson, who discovered that she was suffering from low blood sugar. He placed her on a diet high in protein and low in refined starches and sugar. "Within a week she began to feel better, both physically and emotionally. In two weeks she was able to travel alone, which had been impossible for her for years." Today she is cured.

It is too bad that psychiatrists are not educated in nutrition. Naturally, regarding this sugar thing, according to the rule that two and two make four, they figure that if the blood sugar is low they can raise it by feeding the patient more sugar.

The same error you will remember from Chapter Five was made by Dr. Stutte in that German court.

Effect of Sugar on Blood

The work of Dr. Peter Bernfield of Tufts College Medical School is further proof of the delicate effects that food has on our bloodstream. In studying the electrophoretic blood patterns of hundreds of persons he has found no two exactly alike. They are what might be termed "electric blood

prints" and could almost be used by the police for identification purposes, except, he says, for the fact that some aspects of the pattern change with the health and the diet of the person. Thus a person who was a sugar eater and suddenly dropped it from his diet would experience a significant change in his electrophoretic blood pattern.

Sugar Irritates the Tissues

Hutchinson and Mottram in their book *Food and the Principles of Dietetics* (London, 1943) describe the propensity of sugar to inflame the tissues of the stomach because of the degree of concentration of its solution. They say:

> In strong solution sugar is an irritant to the tissues. In contact with the skin, it is apt to set up superficial inflammation. This is familiar in the form of eczema which is apt to appear in diabetics from the contact of the sugar-containing urine with the skin, and from the similar condition occurring on the arms of grocers and other persons who frequently have to handle sugar, and it is on account of its irritating properties that sugar cannot be used as a subcutaneous ailment, (food), though otherwise well adapted to fulfill that function. All attempts to use it in this fashion have been frustrated by the pain which it sets up. The same is true of the stomach.
>
> This irritating effect on the mucous membrane is accompanied by the production of much mucus and the pouring out of a highly acid gastric juice.

Sugar Kills Worms

Talk about sugar irritating the tissues—it has been discovered that ordinary white sugar can kill tiny worms that harm plants! The experimental work has been done at the U. S. Department of Agriculture, Horticultural Field Laboratory, at Orlando, Florida. And *Science News Letter* (March 18, 1961) has the following to say about it:

> Ordinary sugar has been found one of the best worm killers ever known. Not particularly harmful to earthworms, the sugar is as deadly as poison to the tiny round worms, or nematodes, that parasitize and sicken food-producing plants and trees.
>
> This is the first time a substance not generally classed as toxic has been shown to be a nematode killer. Unlike other pesticides, the sugar kills by de-

hydrating the worm. It literally shrivels him up into dust. So effective is the method that in some of the tests, scientists could not find a trace of the worms—even with a microscope—twenty-four hours after they had been doused in sugar water.

Think of it; a solution of one per cent sugar had the power to shrivel a worm into nothing. Then what can it do to the human organism? In this experiment, when the sugar solution was applied to the soil in which citrus trees and corn were growing, the growth was retarded. So, the sugar can kill a nematode and also a tree whose roots were sugared. *Science News Letter* says that the sugar can be flushed out of the soil when all the worms are dead and the plant or trees can go on growing normally.

The Story of Joe

(based on material in the book *Degeneration-Regeneration* by Dr. Melvin E. Page)

When Joe was a youngster he was an average student in school. Not the best nor the worst. He was athletically inclined and did well in all the physical activities of school and YMCA. In high school he began to have a harder time getting through some of his courses, especially the classes that occurred just before noon and the first part of the afternoon.

The trouble was that from eleven o'clock to twelve it was hard for him to pay attention to the teacher. He felt light-headed and dizzy. He attributed this to hunger so it became a habit with him to eat some malted milk tablets at eleven. This helped some.

At the first afternoon class he was so sleepy that it was hard for him to pay close attention to the teacher. However, he got through high school and went to college.

At college the same thing happened, only to a greater degree. As a result Joe failed those classes which occurred at eleven and at one. He was hauled on the carpet by the dean. Neither he nor Joe could explain the situation. It was decided that Joe should take an enforced vacation from school until he would or could study harder.

Joe went west to teach in a country school. Since the school was many miles from town it was necessary for Joe to live in the schoolhouse and cook his own food. Hunting, his recreation, was also the source of supply for the major portion of his food.

That his life apparently was good for him was proven when he returned to college two years later. His scholastic standing was completely different at this time. He made good grades and did even better than before in athletics.

It wasn't until years later that the real story was unfolded. As a boy at home Joe had the diet of the average American. That is, he had milk, meat, vegetables, bread, fruit and, of course, pie, cake, ice cream and candy. At college he had even more pies, cakes, etc. But in the west he had no desserts for two years. Sweets were the secret of his trouble and their omission the cause of his recovery.

Judge Philip B. Gilliam

A person who is using the nutritional approach to cure juvenile delinquency is Judge Philip B. Gilliam of the Juvenile Court in Denver, Colorado, who has been a judge for thirty years in criminal and juvenile courts. During that time he has had extensive experience with juvenile delinquents, having heard over 28,000 cases.

In a personal letter to the writer Judge Gilliam set forth some of the results of this wide experience. He is not one to oversimplify the problem. He recognizes the psychological factors often involved, such as broken homes and lack of personal security and self-confidence. But a key factor in his approach to the problem is improved nutrition.

In his letter Judge Gilliam makes these statements:

> Deprivation of proper food is a very big element in causing many emotional and physical problems, including delinquency. Over the years, I have watched this very carefully, and I find a great majority of the children coming to my attention are suffering from malnutrition. Starvation in the land of plenty, creating instability, anger, lack of self-esteem and eventually delinquency.
>
> The jitterbug diet of foodless, food-empty calories, sugar and starch, has created terrific problems for the teenager of emotional, mental and physical illness. This after-school diet of snacks—potato chips, soft drinks and candy, is one of the great enemies of youth today.
>
> Part of the program in Denver in correcting juvenile delinquency is the use of forestry camps. Boys are sent up to a trailer village in the mountains for ninety days for a work-therapy project. If they make good under this plan, we avoid sending them to state institutions.

These camps have been extremely successful primarily for these reasons:

1. Creative work under inspirational leadership.
2. Plenty of rest and sleep.
3. High regard for the individual as a person.
4. A well-balanced diet of high protein food (low sugar, carbohydrates and starch, etc.).

It has been amazing to me to see the most difficult delinquents change not only physically, but emotionally.

Judge Makes Friend with Delinquent

There is an article in *The Kiwanis Magazine* of May 1966 in which a judge makes friends with a delinquent boy who is brought before him on a charge of disorderly conduct. He beat his mother in a quarrel over the family car. But on that bench along with the judge sat a psychologist, Dr. Benedict Mayer. The latter took the surly boy to a conference room and spent an hour with him. As a result the judge placed the boy under six months supervision of the psychologist.

The judge said, "We believe there is some reason behind most youthful misbehavior. . . . We try to get at that reason." But do they really?

Dr. Mayer has obtained marvelous results. Fewer than 5 per cent of his wards will break the law again "in the near future." But, he admits, "We don't know for how long."

Part of the accomplishment is due to the friendliness of the psychologist, but he can't live with his cases all their lives.

In my opinion, a nutritionist *and* a psychologist should sit with every judge in all criminal cases, not only those involving juveniles.

The Whitman Murders

On August 1, 1966, Charles J. Whitman, 25, an architectural student who had been undergoing psychiatric treatment shot and killed thirteen persons from the University of Texas tower, after killing his wife and mother. He also wounded thirty-four persons.

According to a note left by the killer he had been having severe headaches. At the autopsy Dr. Coleman de Chenar said that Whitman "had a brain tumor close to the brain

stem which undoubtedly caused him much mental pain and possibly contributed to his insane actions."

Here are some statements made by Dr. Maurice D. Heatly, psychiatrist of the University of Texas, prepared after Charles J. Whitman came to him for a consultation on March 29, 1966:

> This massive, muscular youth seemed to be oozing with hostility as he initiated the hour with the statement that something was happening to him and he didn't seem to be himself.
>
> He expressed himself as being very fond of his wife, but admitted that his tactics were similar to his father's and that he had on two occasions assaulted his wife physically. He referred to several commendable achievements during his Marine service, but also made reference to a court-martial for fighting, which resulted only in his being reduced several grades to private.
>
> He readily admits having overwhelming periods of hostility with a very minimum of provocation. Repeated inquiries attempting to analyze his exact experiences were not too successful with the exception of his vivid reference to "thinking about going up on the tower with a deer rifle and start shooting people."
>
> He was self-centered and egocentric, and at the same time he wants to improve himself.
>
> No medication was given to this youth at this time and he was told to make an appointment for the same day next week, and should he feel that he needs to talk to this therapist he could call me at any time during the interval.

There seems to be an indication that Whitman could have been suffering from low blood sugar. It is still not too late to check his diet with his father and brother and to study his medical record in the marines. They no doubt take a blood sugar test as a routine thing.

In the meantime Texas Governor John Connally has called a national conference of medical experts to try and find a reason for Whitman's rampage.

Lyndon Johnson issued a statement saying that Whitman's action was senseless, and should teach us a lesson; let us pass a law to prevent wrong persons from obtaining firearms.

Oh yes, some dexedrine pep pills were found in Whitman's footlocker on the Texas tower, and Dr. de Chenar

said they were more dangerous than alcohol. As a few months before, a man named Speck had killed six nurses. Whitman killed fifteen. Will this trend continue?

These Terrible Turks

A Turkish police official visiting in Victoria, British Columbia, in 1961 is responsible for the statement that there is no juvenile delinquency problem in Turkey. He states that it is all a matter of rearing respectful, law-abid ing children. He said, "The Turkish family is strong. The children respect the family—even monied children. They do nothing without parental consent until they are grown up and married."

When I read this, it seemed to be an oversimplification. I thought at once that the amount of sugar-containing foods consumed by our two countries might do much to explain the difference in juvenile delinquency. And sure enough, we consume almost five times as much sugar per capita per year as the Turks do—over one hundred pounds per year for the U.S.A., twenty pounds per year for Turkey.

CHAPTER TWELVE

Roseto, Pennsylvania

Dr. Stewart Wolf, head of the University of Oklahoma's Department of Medicine, made a study of sixteen hundred Italian inhabitants of the city of Roseto, Pennsylvania, in the foothills of the Poconos, and found them to be a very happy long-lived people. Also, they get less than one fourth of the heart attacks that people in neighboring towns get. Yet they eat a lot of fat, and many of them are obese.

What interested me was that there was practically no crime in Roseto. I went there to observe for myself. Being Italians, the Rosetans drink wine. Their consumption of sugar therefore is very low—practically no soda pop. I spoke

to some of the older people, and they told me they would eat ice cream only on rare occasions.

But in the areas surrounding Roseto, large amounts of sugarized soda pop are consumed. This is a point worth studying because Dr. Yudkin of London, England, has incriminated sugar as a prominent cause of heart attack. Yudkin found, in studying his heart patients, that in every single case they consumed at least twice as much sugar as those who had normal hearts and arteries.

Another proof that the Rosetans consume less sugar is the fact that they have a low diabetes rate. For Rosetan men diabetes cases are twenty-seven per one thousand. For Italian men living in the adjoining community of Bangor it is forty-two per one thousand, and for non-Italians it is one hundred per thousand.

I have noticed one thing in my own observations at Roseto which is not encouraging. The young people are not following the Italian ways with the intensity of their parents. They are eating more artificial sweets, sodas, candies and refined foods generally. They are eating a lot of ice cream. I was told that they catch colds more often than their elders. They own cars and get less exercise. They are not as interested in vegetable gardening.

So—when the day of reckoning comes twenty or thirty years from now, how will they show up healthwise compared to their parents? Will they be more inclined to commit criminal acts?

C. V. McCollum, M.D.

Hoffman in his book *Cancer and Diet* states:

> Nature did not intend that we should eat much sugar, such as glucose and cane sugar, else our natural foods would have contained more of them. Primitive man never had sugar in amounts greater than are afforded by sweet fruits, except when he secured occasionally a temporary supply of honey. Nature provides starches in abundance, and these we digest into simple sugars. This process requires considerable time, so that several hours elapse between the eating of a few ounces of starch and its complete absorption from the intestinal tract. When we take sugars which are soluble they tend to enter the blood too fast and to tax the body's capacity to take care of them. If much sugar is eaten at one time, there is a tendency to create a high

tide of sugar in the blood. This is a very undesirable condition to establish since it taxes the pancreas. . . . We should never lose our appreciation of the bland flavors natural to fruits, vegetables, meats, etc., through masking them with sweetness, spices, pepper, flavors, acids, etc. . . . We are, as a nation, eating so much sugar that we are crowding out of the diet a considerable amount of other foods which would be far better for us than is sugar.

Hoffman follows this with his comment:

It may be pointed out in this connection that the United States has the highest diabetes death rate in the world and the death rate continues to increase from year to year, regardless of insulin treatment which inhibits the disease but does not cure it.

McCarrison's Rats

To see the effect of diet on the character of people, we might learn something from an experiment on the effect of diet on animals which was done by Sir Robert McCarrison, a great English research physician who spent over ten years with the Hunzas of Northern India around the second decade of this century.

He discovered that the Hunza people of northern India had an excellent diet which caused them to be extremely healthy and happy with no crime problem.

McCarrison decided to find out if rats could be endowed with health equal to that enjoyed by the Hunzas through feeding them on a similar diet. He worked with three groups of rats—one group fed on the same diet as the Hunzas, a second group on the diet of the Southern India rice-eaters, and a third group that was subjected to the diet of the lower classes of England, containing white bread, margarine, sugar-sweetened tea, a little boiled milk, cabbage, potatoes, canned meats and sugared jam.

McCarrison found the Hunza group quite healthy, but group number two suffered from a wide variety of diseases.

The third group, the "British" rats, not only developed those diseases but were nervous and apt to bite their attendants. They lived unhappily together and by the sixtieth day of the experiment began to kill and eat the weaker ones amongst them.

Juvenile Delinquency Can Begin in Pregnancy

John A. Churchil, M.D., chief of the Department of Re-

search in child neurology at Detroit's Lafayette Clinic, in an interview reported in *Medical News* (March 4, 1966), said: "A very delicate balance for particular nutrients is needed during pregnancy. If this balance is upset for a period of time it appears that maturation of the baby may not be completed."

Talking to mothers who gave birth to babies with low IQ's, he found that in most cases "their eating patterns were atrocious. If they didn't like meat, for instance, they simply cut it out. They tended to eat nothing all day but crackers and soda pop . . . and these women weren't poor. . . . Not only the health but the mentality of their baby depends on (the mother before and during pregnancy) eating a properly balanced combination of foods."

Dr. Cecilia Rosenfeld on Children

Concerning the food habits of children, Dr. Rosenfeld, mentioned in Chapter Ten, said:

> Oftentimes children are diagnosed and treated as being emotionally disturbed when as a matter of fact they are actually physically ill, often through bad eating habits.
>
> If children almost habitually eat school lunches made up of macaroni, donuts, sweet rolls or a sandwich, and soft drinks, their metabolic balance will be upset.

Youth Badly Taught

MD magazine, April, 1965, spoke of mass miseducation of youth and recommended a vigorous program to revise school health courses. The Samuel Bronfman Foundation reported after a study that health instruction was totally inadequate or almost nonexistent in many schools, so that many students have a terribly distorted attitude towards health.

It is in the schools where the children should be taught the evil effects of sugar and other refined foods. Instead, they have soft-drink coolers right on the premises. I have seen it. When I asked a teacher why they had it, she replied, "It keeps the students quiet."

One of the undesirable things about the education of children is the rhymed and fabled stories which glorify sugar.

Look wherever you will and all you'll find are references to sugar and other unhealthful food items. Little girls are

made of sugar and spice and everything nice. Is it any wonder that they laugh at the dentist when he tells them that sugar will rot their teeth?

The other day I was reading *Hansel and Gretel* in German as part of an effort to learn that refractory language, when I came to the part where the children approached the witch's cottage in the woods. Its whole exterior was made of sugar in order to entice them. I suggest that this tale be rewritten in all the school books and that in the new version the cottage be hung with all kinds of attractive fruit on the outside. I recommend that all the children's school books be put through the wringer and all references to sugar be thrust out. Mother Goose was really a goose, as far as good nutrition was concerned.

The "Beatster"

Here is an excerpt from a letter sent by Harold N. Simpson, a biochemist, to *The National Review* (May 23, 1959). It is in reference to Ernest Van den Haag's discussion of the "beat" generation in the April 11 issue. Simpson says: "You look into the diet of these 'beatsters.' Believe me, you raise a child on buns and hamburgers, white bread and hot dogs, ice cream and cokes, and you end up with a juvenile delinquent on your hands. When the quality of the diet declines, the person is not able to think straight. . . ."

Myril Axelrod, writing in *The Reader's Digest* (December, 1955), tells of a tour he made of high school cafeterias. He found well-balanced meals ignored in favor of hot dogs and soft drinks. In one place, out of fifteen hundred students, only ninety ate in the school dining room where they could eat a balanced meal. The rest ate at snack bars and hot-dog wagons.

He says: "I stood on the balcony of a large cafeteria opposite a boys' high school and watched the trays go by. While the counters displayed soups, meats, salads, vegetables, and fruits, the students' trays bore, instead, macaroni, baked beans, bread, cake, pies, ice cream, and coffee."

Pennsylvania State College studied the food habits of 2,536 teenagers and found that only about a quarter of them were eating according to the recommendations of the National Research Council for Good Nutrition.

Teen Riot in Sweden

The following comes from a story in *The Christian*

Science Monitor (Aug. 9, 1966) by Reuters Gothenburg, Sweden:

> About eight hundred teenagers stormed through the center of this port early Monday leaving a trail of destruction behind them.
>
> Police said the youngsters began rioting after a youth club was closed because of the fire risk due to smoking.
>
> The teenagers, finally dispersed by police dogs, broke almost one hundred store windows and damaged several cars, police said.

I have been to Sweden several times and have seen the increasing consumption of the jitterbug type of food there—the ice-creams, soda, and so forth.

More Evidence

A United Press release of May 17, 1958, describes how they found that 85 to 90 per cent of the students at the Canton, Illinois, Junior High School were either anemic or borderline cases. The science instructor of the school said that it was due to the teenage diets which do not consist of the proper foods. Too much patronizing of candy stores and ice cream parlors.

In the *New York Times* (March 27, 1960) in an article entitled "Youths Suffering from Poor Diets," appears the following:

> School work and alertness suffer when the teenage body is lacking in vital food elements. It shows up in bad temper, acne, or loss of stamina. . . . The long term results are impaired health and a weakening of future generations. Malnutrition is sometimes connected with juvenile delinquency.

This, remember, is a statement in the *New York Times.*

The Psychiatrists

The psychiatrists seem to ignore the dining room as a factor in the cause of juvenile delinquency. They continue operating in their rut, writing fancy-worded articles which only tend to confuse the issues. Quoting John Crosby in the *New York Herald Tribune* (May 21, 1962): "The experts in juvenile delinquency are getting to be voodoo priests talking their own mumbo jumbo that doesn't seem to be meaning anything or apply to anything."

Their idea to solve juvenile delinquency is to put more cops on the beat, build more institutions to house them, appropriate more Congressional money, pass laws to make it a crime for a youth to carry a knife, mobilize youth for various purposes, arrest parents of delinquents and put *them* in jail, treat delinquents with kid gloves, use force on them, whip them if necessary, use every possible resource (I am reading these from newspapr clippings I have collected), issue warnings, establish a good emotional climate to provide a vicarious outlet for their aggressive feelings, improve the more traditional correctional services of probation, parole and institutional facilities, create a major national blueprint, give delinquent youngsters skating and music lessons and trips to Greenwich Village coffee houses, get girl scouts to help, turn the problem "across the board," organize urban young service corps, etc., etc., etc., . . . But practically never a word about improved nutrition for youth.

CHAPTER THIRTEEN

An English Boarding School

IN ALBERT VON HALLER'S book *The Vitamin Hunters* (Chilton, Philadelphia) appears the following:

> It had been noted in one of the large English boarding schools that the pupils' achievements were declining to a remarkable degree, in sports as well as in their academic work. The boys became listless and irritable; many of them appeared sickly and in poor spirits. At first, the reason for the sudden change seemed quite incomprehensible. In this particular instance, responsibility rested on the shutting of a small fruit shop in the neighborhood of the school. Here the boys had been accustomed to spending their pocket money for fresh fruit. The supply of food in the school had been plentiful and quite in accord with traditional standards of the period, but there was practically no uncooked food such as lettuce, and the vegetables, as happens all too often when cooking is done for numbers of persons,

were generally overcooked. The closing of the little fruit store had cut off the only source of vitamin C. Supplementary rations of fresh fruit in the diet of the boarding school soon restored the boys to their former state of health.

We know that fruit sugar is far different and better in effect than artificial sugar. It is surrounded with vitamins and minerals.

Are Broken Homes the Cause of Juvenile Delinquency?

All kinds of reasons are presented for the juvenile delinquency problem, but the main one seems to be that these hoodlums come from broken homes. Well, evidently this is not so. In the "Midtown Community Health Study" of Manhattan, New York, (*Public Health Reports,* November, 1963) appears the following: "Almost all the social ills to which man is heir have been laid at the door of the broken home, including juvenile delinquency, drug addiction, and mental disease." The data gathered seemed to show that this is true only under certain rare conditions. In the conclusion of the article there is the statement, "We have found that broken homes are not strongly associated with mental disorder."

Behind the Broken Homes

Here is something I wrote, many years ago:

> It is said that juvenile delinquency is due to broken homes, but what are broken homes due to? Let me not waste any more of your time. Let us look to a good basic nutrition, and we will see a common cause of a majority of our ills. Go into the homes which are the breeders of criminals and you will find a shockingly inadequate state of dietary affairs. Some people are eating themselves into crime, others into alcoholism, divorce, accident-proneness while others are merely eating themselves into a state of mediocrity that is a serious threat to the welfare of our nation.

I will tell you something more significant about certain homes, which are not exactly broken up. Here is what I mean. In a survey made a few years ago of three thousand juvenile delinquents in New York City, it was found that on the average they had only three meals a week at home —three meals out of a possible twenty-one. The rest of the time they were no doubt consuming a typical jitterbug diet

in candy stores and cheap luncheonettes. It is my considered opinion that we can feed our young ones into decency, and even honesty.

A "Broken" Home That Stays Together

Here is a picture of a home that I consider broken, excerpted from *The Lancet,* a British medical journal (October 3, 1964). Notice that the children live on sweets:

> In the dirty council house there live grandfather, grandmother (who is in borderline heart-failure), their daughter, and her husband and three children. They have been summoned for arrears in rent. The daughter sits around smoking incessantly, while granny tries to do her work and makes herself ill in the process. The son-in-law is not on speaking terms with the grandparents. The children are completely undisciplined and *live on sweets* bought by granny since their mother won't buy them food. They send all their washing to the laundry, but seldom pay for it. They are short of blankets but have a new TV set on hire-purchase. Their average I.Q. cannot be more than 80, and they are the despair of our welfare organisations.
>
> As they left the consulting-room, I reflected that at the forthcoming general election this hopelessly inefficient household will have as much power in deciding the running of this country as a normal efficient family unit. But maybe they won't go and vote.

It's the Parents in the Homes

Many homes deserve to be broken. The parents are ill-informed and inexperienced in the right methods of bringing up children. Thus, James V. Gradolf, psychologist with the Hamilton County, Ohio, public school system said, "Parents are rearing emotional and social robots today."

He says, "Children are not getting from home the essential thing, inside themselves." But he is not aware of the poor biochemical condition "inside themselves," which their bad diet produces.

Frank Lewis, principal of the Grant School at Memphis, Tennessee, once said, "Observing the homes of these youngsters, one can't help but wonder how they manage to get to school."

There is also the gang influence outside of the home. S. Saint-Hilaire in *The Canadian Nurse* (December, 1965) said, "Factors motivating poor food habits in this age group

include the gang influence on food fads and other health habits. A desire to conform to their group may lead to very odd food habits sometimes. Here again, education regarding nutritional needs is the best way to promote good food habits."

Easily said, but not easily done. However, under stress of necessity we made an atom bomb, didn't we?

Dr. Sam Roberts Again With Two Killers

In the book previously mentioned, *Exhaustion, Causes and Treatment,* Dr. Roberts states:

> Two of my pugnacious, quarrelsome, and uncooperative patients, one a juvenile, have been killed in the last two years. One was killed by a policeman; the other by a pharmacist. Both came from good families. The police officer fired in self-defense and the pharmacist fired after he was severely wounded by a blow on the head with a claw hammer. The pharmacist had been threatened before by this boy because he refused to let him have certain harmful drugs. Both the juvenile and the young man were uncooperative patients. They ridiculed every suggestion made by my aides and me that might improve their health. They were rude and belligerent. Both were high school "drop outs" and both had *minor criminal police records.* Neither, in my opinion, would have made a good citizen. They probably would have spent their lives robbing, raping, stealing and killing if they had not been slain. They would have tried, perhaps successfully, to escape punishment by proving that they had hypoglycemia. Even if they had cooperated in treatment they might have improved for a short time but would, I believe, sooner or later, have been medical "drop outs" and continued their major crime binge!
>
> When a hypoglycemic patient gets this bad and persists in his belligerencies he can rarely be helped. He is a public menace. Cooperative hypoglycemic patients can always be helped, perhaps even cured.

In my opinion, cases like these should be in a type of reformatory where the diet is the hypoglycemic one. In six or seven months on such a diet there could be a great transformation, a powerful reduction in their pugnacity.

Low Sugar Statistics

In his book, Dr. Roberts states:

Hypoglycemia is not new and it is not rare. While no reliable statistics are available, it is probably the most common disease in the United States. There are five million known diabetics; I would estimate there are five or ten times as many hypoglycemics. For more than twenty-five years I have been a member of a large diagnostic clinic. Patients come from all over the Middle West and from all walks of life. Many corporations send their key executives here for annual checkups. From this experience I would estimate that at least fifty per cent of the work in this country is done by people who are extremely tired or exhausted—and don't know it. Often they do not mention fatigue or exhaustion as a chief complaint. They have accepted it as a part of life! These patients are most grateful when their energy is restored.

Dedicated Teacher

In *Prevention* (October, 1962) there was an article about the fine nutritional work being done by Mrs. Gena L. Larson at Helix High School, LaMesa, California. Mrs. Larson had benefited her own health through nutrition, so when she became cafeteria manager at this high school, she used her knowledge of nutrition to improve the school lunches. She took steps to increase the protein, reduce the carbohydrates, and provide ample fresh vegetables and fruits. Within the period of eight years the improvements in the school lunches produced these results:

1. A marked reduction of injuries and broken bones by the athletic teams.
2. Increase of athletic championships.
3. Increased level of scholarship.
4. Decreased incidence of tooth decay.

Mrs. Larson also reports that by improved nutrition she has turned juvenile delinquents into responsible citizens.

An Interesting School Experiment

A public health nurse, Mary Cantrell had written in the *Journal of School Health* (December, 1959) of a "Health Snacks" program initiated in her district that was meeting with great success. The idea is so simple that one wonders how it escaped discovery for so long.

It all started when Miss Cantrell began to notice the cakes, cookies and jelly sandwiches brought to school by

the children for the midmorning snack most schools allow to tide the smaller children over until lunchtime. Why not make these snacks pay off in better teeth and better health? Why not encourage the children to bring healthful foods that would satisfy their hunger without taking the edge off their luncheon appetite?

It was decided to begin with the kindergarten group. In this way one could initiate good nutritional practices early and set a pattern that might be followed through all the school years and adult life as well. Besides, children at this age are susceptible to new experiences and enjoy teamwork.

A meeting was held with the parents, explaining the importance of having a health snack rather than a sweet, both to maintain the appetite and to help prevent dental caries. The parents cooperated beautifully, so that a rather special program was soon in force. Each day one child would bring a treat for the entire class, and serve it himself. The date was, of course, pre-arranged with the parents. These treats consisted of carrot or celery strips, apple or orange wedges, dried prunes, raisins, dried apricots, peaches or fresh fruits in season. When the children were finished with their snacks they were urged to get a drink of water and "swish and swallow," thereby cleansing most of the food from their mouths.

Once these habits become routine, the children are less and less apt to bring sweets to school for a snack. They accept the idea of good nutrition readily. When a new child transfers to the kindergarten class, he soon learns from the group that sweets are not acceptable snacks. What more effective way could there be to implant the idea of the desirability of eating healthful foods?

Of course Miss Cantrell's district doesn't stop with kindergarten instruction on good eating. A program of parental information and continued opportunities for the children in the upper grades to eat well is maintained. All the high schools have health snack machines that dispense apples, oranges, and other beneficial foods.

Fluoridation Makes for Increased Sugar Consumption

Laurence Galton, in an article in *Parade* (July 11, 1965) says that among American youth between fifteen and twenty-four there are too many who are obese because of too much starch and sugar in their diets, a condition which will shorten their lives. He doesn't seem to know that their

condition could also shorten other people's lives, the people who are murdered by some of these big sugar eaters.

He draws attention to the fact that in an examination of nine hundred fifty high school students at Berkeley, California, 13 per cent of the girls and 11 per cent of the boys were found to be obese. Berkeley is a non-fluoridated city. But in Newburgh, New York, a long-time fluoridated town, in a study of twelve thousand students, 30 per cent were found to be obese.

Before fluoridation, the dentists would warn children to go easy on sweets, but evidently now that the fluoride is expected to protect the teeth, the attitude is that there will be protection in spite of the sweets. Therefore the kids are overdoing the sweets.

The fact is that if the kids avoided sweets there would be no need for fluoridation.

CHAPTER FOURTEEN

Dr. Sam Roberts' Work

IN THIS CHAPTER I would like to gice more quotations from Dr Roberts' book *Exhaustion, Causes and Treatment.*

He says:

> Low blood sugar is caused mainly by the overindulgence in sugars and starches. (The latter are converted into sugar by the body.) Other common factors are cigarettes, coffee, excessive alcohol, and other faulty habits.
>
> All give the patient an immediate "lift," raise the blood sugar temporarily by opening wide the sugar carburetor (islands of Langerhans) to theoretically secrete an overabundance of insulin.
>
> The "lift" is short-lived, usually not more than two hours, sometimes less. Then all the physical and mental symptoms return with increased intensity.
>
> Q. Doctor, since there are 25,000,000 or perhaps 50,000,000 mild or severe hypoglycemics in this country, why has the medical profession neglected this debilitory disease?

A. There are many reasons: I have mentioned a few. This disease mimics so many other mental and physical diseases that it is often quite difficult to diagnose.

Q. Doctor, because of this serious mental and physical degeneration, how do you believe this problem leads to crime?

A. This will have to be a long answer, perhaps a lecture. I am unable to obtain accurate statistics on the number of beds occupied by mental patients because they are not all in institutions. Many are given home care. From what I have found, however, I believe the increase has been about the same as crime. I do not believe these problems are completely insoluble. I believe we should primarily think of the juveniles and the first crimes of young men and young women. I think the problem should be approached first from a chemical point of view (hypoglycemia); then, in juveniles, with more home and school discipline, more real jobs on weekends and during vacations, and more education in good nutrition, beginning not later than the freshman year in high school.

I believe also that mental disease and crime should be approached as a unit, not separately. It should be a challenge to every physician—no matter his specialty!

Increase in Crime

Dr. Roberts says:

The tremendous increase in crime, as reported in a personal communication to me by the greatest authority on crime in the United States, is appalling! I shall read a report from a man who knows more about crime than anyone else in U.S.A.

December 30, 1965

"In response to your request you will find attached a tabulation showing the percentage increase in Crime Index offenses from year to year since 1955. You will note the increase from 1955 to 1964 is 107.9 per cent.

"The Index crimes referred to above are murder and non-negligent manslaughter, forcible rape, robbery, aggravated assault, burglary, larceny $50 and over and auto theft. We do not collect information relating to the number of offenses known to police on crimes other than the Index offenses.

—J. Edgar Hoover"

If this crime rate continues through the next ten years and thereafter, no one will be safe to walk on the streets of our cities—and our homes will have to be barricaded and converted into fortresses. . . .

I believe many juvenile criminals are sick from malnutrition and spoiled from lack of discipline. Every physician, his aides, every welfare worker, athletic director and every public school instructor should teach good nutrition through all the school years. I find that teenagers—boys and girls—want to be taught nutrition. The girls want to have lovely figures and good minds so they will be popular at school events and be able to qualify for college. The boys want to learn what it takes to have strong bodies, be oustanding athletes and, later, become successful in their chosen field or profession, as worthwhile citizens.

Malnutrition Is a Cause of Crime

The following is from another section of *Exhaustion, Causes and Treatment.*

Q. Since teenagers and, frequently, sub-teenagers, consume large quantities of sweetened beverages, candy bars and other sweets and neglect nutritious foods, do you think their poor diets could be a factor in teenage vandalism, crime, and sex promiscuity?

A. Yes, I am certain it is *one* factor. However, there are two other factors: parental neglect and idleness. Work must be made for teenagers. One father whose son had been in minor troubles gave him a high-powered lawn mower, the kind that mulches the grass and returns it to the soil as fertilizer. It was bright yellow and the boy was almost as proud of this mower as he would have been with an automobile. The father made the following deal with the boy: He was to survey the neighborhood lawns as to size, terrain, etc., and make a contract with his neighbors to keep the lawns mowed and fertilized (at least, in part) for a certain sum. The son was to repay the father the cost of the mower by turning over one-fourth of his monthly income. This gave the son some business experience, which few children have. With each payment the interest, which was four per cent per year, was reduced —something loan sharks do not do! The lawnmower was almost paid for by the end of the sum-

mer. Then the boy found some jobs on Saturdays and holidays to rake and weed other lawns and the mower was paid for by Christmas! He was out of debt—and proud! The boy was now a contractor, a dignified name, which he liked. He saved his money. He was usually so happily tired at night that he did not date often. He was allowed to spend his money in any way he desired. He chose, however, to put his earnings in a savings account to apply on the purchase of his first automobile when he reached the necessary legal age.

Mothers also can provide work for teenage daughters. Most girls are interested in 'hairdos.' One mother got her daughter a part-time job in a beauty salon where she could do odd jobs while observing the various styles of hair dressing. She learned to do her own hair and nails. She was permitted to keep her "beauty shop money" as an extra allowance.

These are only two examples. Ingenious parents can develop many other ideas and other schemes.

Discussion of Excessive Sugars and Starches

Still quoting from Dr. Roberts:

One of the worst habits that Americans have acquired is their use of carbonated beverages. Many persons take such beverages by the half-pint many times a day. Sugar supplies only calories; it has no other nutritional value, and the vitamins provided by other foods may be sapped by sugar in liberating calories.

I was able to procure through commercial channels some statistics on the consumption of sweetened beverages in the United States during 1951 and 1952. In 1951, twenty-five billion, fifty-one million (25,051,000,000) bottles of sweetened carbonated beverages were sold in the United States. This astronomical figure does not include sugar-containing beverages dispensed at fountains and other places or what sugar is used in bakeries or in home cooking, canning, etc.

The trade also estimated a 15 per cent increase in consumption of sugar-containing beverages in 1952; this increase has probably continued each year.

Coin cooler dispensing sweetened beverages increased by 4,000 per cent from 1940 to 1952.

When one considers that each eight-ounce bottle of

sweetened carbonated beverage contains from three and one-half to five teaspoonfuls of sugar, one can easily compute the large quantity of sugar consumed each day in this manner.

In August, 1965, the Department of Agriculture reported sales by candy and confectionery stores during the first half of the year spurted 15 per cent ahead of the previous year. By comparison, sales by retail food stores increased 5 per cent. Sales by public eating places climbed 11 per cent.

A brisk sales pace!!! Soon we will be spending more for soft drinks, candy and other forms of sugar than we will be for luscious Kansas City steaks, delicious fruits and vegetables! Could this be one of the reasons 54 per cent of our young men are rejected for military service because of physical and mental diseases? I believe it is, at least, one reason—perhaps the main reason.

Bear Feeding

As a bit of dessert to round off this chapter, here is a notice posted in Yellowstone Park, addressed to its free-roaming bears.

NOTICE TO BEARS

BEWARE OF SABOTAGE

We want to warn you bears that certain humans in this park have been passing the biscuits and soda pop to some of your brothers. Keep your self-respect—avoid them. Don't be pauperized like your uncles were last year. You remember what happened to those panhandlers, don't you?

Do you want gout, an unbalanced diet, vitamin deficiencies, or gas on the stomach? Beware of "ersatz" foodstuffs—accept only natural foods and hunt these up yourself.

These visitors mean well but they will ignore the signs. If they come too close, read this notice to them. They'll catch on after awhile.

The Committee

If you can't read, ask the bear at the next intersection.

The notice does not say that sugar might make delinquents of the bears, that they might lose their friendly dispositions and attack the visitors. In the San Diego, California, Zoo recently, bears became sick from the refined and sugary foods given them by visitors.

CHAPTER FIFTEEN

Dr. Joseph Wilder

IN A BOOK CALLED *Handbook of Correctional Psychology,* by Lindner and Seliger (Philosophical Library, 1947) there is a long chapter by Joseph Wilder, M.D., entitled "Sugar Metabolism in Its Relation to Criminology." He is the Wilder whom we quoted in Chapter Two· "Dr. Wilder and Low Blood Sugar."

I will quote parts from it:

> For the problem of delinquency it is important to know that children, as a rule, not only show a more marked tendency to low blood sugar, but seem to get symptoms quicker. . . .
>
> J. Wilder has compiled from the literature up to 1940 a list of crimes and infractions of law committed either under the influence of insulin (an overcharge of it) which reduces the blood sugar, or in a state of spontaneous hypoglycemia (low blood sugar). The list includes disorderly conduct, assault and battery, attempted suicide and homicide, cruelty against children or spouse, various sexual perversions and aggressions, false fire alarms, drunkenness, embezzlement, petty larceny, willful destruction of property, arson, slander, and violation of traffic regulations....
>
> Among the special criminal tendencies... attempted ... theft, violence, petty larceny with the frantic attempt to secure food, especially sweets....
>
> The frequent conflicts in matrimonial relationship arising from attacks of hypoglycemia....
>
> Hypoglycemia is comparatively frequent in nursing mothers and after exertions such as childbirth. He also raises the question whether some of the frequent unmotivated killings of newborn babies by their mothers may not have been committed in a state of hypoglycemia after childbirth.

A Case of Matricide in a State of Spontaneous Hypoglycemia

Dr. Wilder states·

> One of the best investigated subjects ever tried in

court, acquitted after the connection between his crime and hypoglycemia could be satisfactorily proved, may for the time being serve as a model case. It was published by Hill and Sargant in 1943. (*Lancet,* 1943, 1,526).

A twenty-year-old man, living alone with his mother, stabbed her to death with a kitchen knife; many wounds were found on her body. In the five days preceding the murder, he had worked hard and had had but irregular meals; besides, there had been some quarreling with his mother over money. On the morning of the day of the murder he struck her, a very unusual act for which he apologized. He ate very poorly on that day. He had his last carbohydrate meal at noon. Between 9:00 and 10:30 p.m. he drank four pints of mild ale. At 11:00 p.m. there was again a quarrel with his mother over money and she pushed him out of her room. At this moment he suddenly felt thirsty, went to the kitchen to get a bottle opener, saw a kitchen knife, and then "something came over" him: "I was like a homicidal maniac." He stabbed his mother to death, then realized what he had done, wiped the knife for fingerprints, washed and dressed, and left the house. There is a gap in his memory for seven hours following the crime. The next day, he gave himself up to the police and made a full statement.

After the patient's arrest, his family physician notified the defense that two years prior to the crime a sugar tolerance curve had shown a tendency to hypoglycemia (56 mg. per cent three hours after ingestion of sugar).

Is Gardening and Farming the Answer?

John H. Tobe, a nurseryman of Toronto, Canada wrote in our July, 1960, *Organic Gardening and Farming* magazine that a friend of his who has been on the Royal Canadian Mounted Police for forty-five years had made thousands of arrests for crime, but not one of them was a nurseryman or an ardent gardener.

Once, an osteopath friend told me that he had read of a vicious group of Federal prisoners, killers all of them, who were transferred to a farm which they cultivated. They all became as mild as milk.

Dr. Eric Goulston, M.D., of Sydney, Australia, wrote in *The Medical Journal of Australia* (January 22, 1955), "It is my clinical impression that patients who are active garden-

ers have a much greater host resistance to internal carcinoma (cancer) than to non-gardeners. Their survival period appears to be far greater in my experience."

There is a farm school at Doylestown, Pennsylvania that used to draw many of its students from problem boys. I understand that they sent out almost all of them as much better-behaved individuals, who did excellent work in farms and in gardens all over the country.

My suggestion would be to draft all young people, boys as well as girls, at the age of fifteen for one year of work at a farm or garden camp, having separate camps for each sex, with special attention to their diet, that is, they must raise their own foods and be kept on a high protein, no sugar, diet. There should also be a great deal of attention to the physical development of their bodies . . . with an attempt to approach the old Greek ideal of physical perfection.

I am sure that in a few years' time it would show whether the method would work. At the same time it will take boys away from their mothers' apron strings at a time when they should be getting out on their own. It might be a worthwhile try. The government is spending so much money for less important projects.

While on this subject, how about the derelicts on the Bowery in Manhattan? A good solution would be to put them on the land and have them raise their own food. But the general attitude today is: "Am I my brother's keeper?"

Dietary Habits of Adolescents

There is "no cause for complacency" about the dietary habits of Americans—especially adolescents—according to the National Vitamin Foundation's recently published third report. Studies of large groups of teenagers throughout the country showed they have blood levels particularly low in vitamins A and C, accompanied by deficiency diseases such as pellagra, scurvy and rickets. The Foundation's report is based on results of work done by some of the country's leading nutrition researchers and sustained by contributions from twenty-one suppliers of vitamin preparations. The organization is probably best known for supporting research which led to official recognition of vitamin B_6 as a dietary essential for man, and for its conviction that B_6 deficiency is a leading cause of dental caries. Copies

of the new report are available from the National Vitamin Foundation, 250 W. 57th Street, New York City 10019.

Some Children Found to Have Poor Diets

Thousands of American children are starving without hunger pains, according to Al Jenings, head of the School Lunch Program for Oklahoma City, Oklahoma. Jenings bases that statement on a survey of over three thousand children made by the state's Department of Education School Lunch Division. "Our children are not eating the foods in kinds or quantities that are recommended by the National Research Council," the study says. "Four out of ten do not have adequate calcium, three out of ten lack iron, four out of ten are lacking vitamin A, three out of ten do not have adequate vitamin C." In addition, 23.4 per cent of the pupils studied had missed two or more meals a day, and of one sixteen-and-older group, 13.3 per cent had missed breakfast.

The study included students whose families were in three income groups—$3,000 or less, $3,000 to $7,000, and over $7,000. Researchers found little difference in eating habits of the children from each group. Often students from the poorer families fared better nutritionally than those from the wealthier ones. "The need for nutrition education is as great for those in the higher level as it is for those in the low or moderate income groups," the report said. "This can be a national problem, since these girls are tomorrow's mothers," the official study concluded.

Bad Juvenile Nutrition

Here is a comment about students' diets as published in *The Flint* (Michigan) *Journal* (Feb. 13, 1960):

> "Teenagers today appear to have cast-iron stomachs," two local high school cafeteria managers declared.
>
> "Their diet simply amazes me," confessed Mrs. Erdine Baker, cafeteria manager at Central High School.
>
> A characteristic eating habit of teenagers, according to Mrs. Baker, is their overabundant use of salt and pepper: It's not unusual to see young persons amply salting potato chips.
>
> "One boy doesn't even bother to sprinkle the pepper on his meal," the cafeteria manager shuddered. "He actually takes the lid off the shaker and spreads the pepper with a knife. The first time I saw his plate, I

thought someone had accidentally tipped the pepper shaker over on it, and I tried to clear the dish away. We had quite a struggle before he finally convinced me that was the natural appearance of his plate."

Still another eccentricity of the teenage crowd, she reported, is enthusiasm for dressings and condiments of all kinds. To a barbeque already heavily spiced, they insist on adding catsup, mustard, onions, pickles and relish. As for salads, "They're completely camouflaged under two or three layers of dressing. By the time the teenagers are satisfied," moaned the manager, "it looks to the rest of us as if they bought a heaped-up bowl of salad dressing, and the fruit underneath is incidental."

Prisoners Riot

Recently there was a riot in a prison—the prisoners were demonstrating because they weren't being given dessert. This proves their addition to sugar Thirty prisoners and three guards were hurt Here is an important field for study.

Today many criminals come to prisons as amateurs, but in the company of veterans became indoctrinated with a love of crime The state should counterattack this tendency by good feeding and providing sweet desserts made from unsugared fruit

Prisoners at the beginning should be overloaded with apples, bananas, figs, nuts, and other sources of natural sugar.

Jail Food

Margaret Wemple of Bridgewater, New Jersey, who recently served a ninety-day sentence for driving while intoxicated, sent a check for $820 to the county, this being what the estimated cost was for her food and lodging in the jail.

She said, "I consider the taxpayers have been gyped in being forced to support me for these three months." She specifically urged that the money go to the jail kitchen "for the purchase of fresh vegetables and salad ingredients, both of which I found woefully lacking in the diet provided during the summer of 1966."

The county returned the check, "with thanks." The idea of giving better food to prisoners must have sounded like a big joke to the prison authorities.

Margaret Wemple's action gives me an idea. So much money is being collected from the public for various purposes; why not a collection for improving the nutrition of prisoners? If any of my readers are interested they might make such tax-deductible contributions to The Soil and Health Foundation, Inc., Emmaus, Pa. I am the president of this non-profit foundation which is approved by the Bureau of Internal Revenue. I will guarantee that there will be a very minimum, if any, of overhead expense for this project. None of the officers of this foundation is permitted by its charter to draw a salary.

If such a project could be launched, I would agree to give a series of talks to such prisoners so that they will understand the basis for the experiment.

CHAPTER SIXTEEN

The Chinese in New York City

IN CONNECTION with the juvenile delinquency problems in New York City, I have often wondered why the Chinese youth do not pose a problem. The Chinese are a very peaceful lot, and they are rarely involved in murders, violence or crime of any nature. We know that their religion causes them to love their parents and their ancestors. Among the Chinese a son might not desire to do anything to disgrace his parents, but also because of that affection, he is usually at home for meals and not roaming the streets.

In a survey recently of three thousand juvenile delinquents, it was found that on the average they have only three meals a week at home. The rest of the time they eat in candy stores and cheap luncheonettes where they indulge freely in their jitterbug diet of ice cream, sodas, candy, cheap pastry, white bread and other refined foods. But the Chinese boy, who eats at home, gets a minimum of this kind of food. He gets plenty of vegetables, of which the Chinese are quite fond.

The Puerto Rican youth is no problem when he is in Puerto Rico, where his food is on a more primitive level. There is far less money available there for ice cream and

candy. In the streets of San Juan, Puerto Rico, one sees carts with things for sale that are foods, not sugar. For example, cracklings, which are the crisp brown skin of roasted pork, are sold like candy and consumed on the same scale. Perhaps candy stores in the problem cities should be subsidized and nutritionized, so that they could sell attractively gotten-up, healthful food things. When are the social agencies which are involved in this problem going to investigate diet as an important underlying factor in juvenile delinquency?

Chinatown Crowded but Not Delinquent

The following is by Dr. Joyce Brothers, in the October, 16, 1966, *Philadelphia Bulletin*:

> Among American ethnic groups, Chinese-Americans have one of the lowest rates of juvenile delinquency. The reasons were reported recently at the annual meeting of the American Psychological Association in New York by Dr. Richard T. Sollenberger, of Mt. Holyoke College.
>
> Based on a study made in New York's Chinatown, the report offers lessons for all of us.
>
> Chinatown is densely populated, with practically no recreational facilities. The buildings are old. The people are relatively poor, their social status is not high, and they constitute a discriminated-against minority group.
>
> In all, it would seem to be an ideal breeding ground for delinquency.
>
> Yet, in Chinatown, though the school buildings are old, the janitors probably have an easier time than anywhere in New York. Everything is spotless. There is hardly a mark of any kind on the walls, nothing is broken, and books are in as perfect condition as their age will allow.
>
> The children themselves are meticulously clean. They are good students who almost never fight. And how do their parents manage this miracle?...

Various reasons are given: the emphasis on family life, treasuring old cultural traditions, strong family structure, divorce being rare, wives respect husbands and show it. But isn't it probable that all of this is made possible by a health within, by a strength coming from an old-fashioned diet?

Time will tell, because the young Chinese and Japanese in this country are beginning to take to the candy, cola, doughnut, ice cream regime, aping their white American friends.

The other day in San Francisco's Chinatown, in a Chinese luncheonette, I saw a young Chinese lad with a candy bar in one hand, an ice-cream cone in the other, and a half-consumed bottle of soft drink in front of him.

What will happen to these young ones in another five or ten years?

Another Cause of Low Blood Sugar—Drugs

There are other ways besides consuming a lot of sugar that in many cases cause low blood sugar. The taking of certain drugs can do it. This is known as a "side effect."

The Lancet (December 24, 1966) describes some cases of hypoglycemia being caused by taking a drug known as propranolol, used in the treatment of heart irregularities.

There was the case of a woman of seventy. She had had episodes of mild confusion after an operation. She was told to decrease the amount of carbohydrate in her meals, and on this regimen her symptoms improved. Some time later she was given propranolol on account of increasing angina of effort, and in the next few weeks she was admitted to the hospital three times in a hypoglycemia coma.

The same occurred in a twenty-year-old diabetic young man.

Aspirin Lowers Blood Sugar

The Food and Drug Administration, in evaluating new drugs, errs seriously in giving no consideration to the effects such drugs may have on an individual's nutritional status. That charge was made this week in Boston by Anthony A. Albanese, M.D., before a meeting of the International Society for Comprehensive Medicine. The society is an organization to promote the interdisciplinary approach to medical practice—an approach similar to group medicine that will utilize the expertise of paramedical technicians such as biochemists, nutritionists, pharmacologists and others.

In an interview with Rodale's *Health Bulletin* following his talk, Dr. Albanese pointed out as a prime example of his contention a talk given the previous day by FDA physician Robert J. Robinson. Dr. Robinson mentions

numerous ways that the FDA seeks to determine possible toxic effects of new drugs, but mentioned not one word about possible adverse effects on the nutritional status of the patient.

Salicylates (aspirin and similar compounds), Dr. Albanese stated, have been found in his own studies to lower the blood-sugar levels of children and inhibit the ability of the children to convert carbohydrate to glucose. "This can lead to even more serious results than the rheumatic and other diseases the salicylates are used to treat," Dr. Albanese said. Such results might be severe reduction of resistance to other diseases, nervous and emotional depression, and even mental retardation if the therapy should be carried on long enough.

"Yet salicylates are approved for treatment of rheumatic diseases of children with no consideration of this dangerous nutritional effect," Dr. Albanese said. He is director of the Nutrition and Metabolic Research Division of the Burke Rehabilitation Center, White Plains, New York.

Psychiatric Research in Delinquency Behavior

An article on this subject appeared in the *British Medical Journal* (September 17, 1966). In differentiating mental patients as criminal offenders or non-offenders, attention was drawn to environment as a factor. For example, illegitimacy was three times more common among the offenders. But isn't it possible that in a home where illegitimacy occurs there would be a greater laxity in observing the rules of diet? A greater dependence on the so-called quick-energy, cheap carbohydrate foods?

In a study of boys at a correctional institute it was found that the offenders showed certain signs that they would later come before the juvenile courts. One of these is an "energetic and defiant quality." I can see the "energetic" part of it as being an artificial, temporary energy, whipped up continually by a high-sugar diet.

Incidentally, I imagine there is no illegitimacy among the Chinese in New York, Philadelphia or San Francisco.

Health Candy

I have just given a health candy bar to two of my grandchildren who are visiting with us. The bar contains dates, coconut, figs, chia seed, black molasses, honey, mixed grain meals, brewers yeast, wheat germ, bone meal, whey powder,

mixed sea vegetables, alfalfa powder, and natural—not coal tar—flavoring. It contains the statement "No sugar or glucose added."

This candy bar is delicious in spite of the long list of ingredients and my grandkids gobbled it up.

The price of the bar is 15¢ but, considering its size, it should sell for about 7¢; it could be done if they could sell millions of bars. But because of the low volume the cost of production is high.

This candy can be purchased in the average health-food store, but if government nutritionists were on the ball it could be available in every candy store and school in the U.S. The bone meal in it would prevent cavities in the teeth.

Incidentally, chocolate is a prominent causer of allergies, and because of its tendency to "bloom" or turn grey, chemical emulsifiers have to be added which make chocolates dangerous as a food. The Food and Drug Administration should ban the use of chocolate.

New Non-sugar Food Products Needed

According to UPI (October 17, 1965) architect James Burleson, who visited several college campuses in Texas in order to draw up plans for a new college cafeteria, found that the average student does not have a regular lunch.

He has a morning doughnut break between classes and then an afternoon soft drink break.

This information was given to the San Jacinto College Board of Regents, but it will probably stop there. Nothing will be done about it.

My suggestion is that a tasty, but healthy, food product be developed that could be available to students who are in a hurry, something that looks like and is handled as a sandwich.

In Pittsburgh in September, 1966, plans were made to feed a roll called a "yummy roll" for breakfast to three thousand school children. It would come in peanut butter, cheese or meat substances.

My suggestion would be to eliminate wheat or rye in any form from these rolls, to use soybean instead. Vegetarians have learned to do all kinds of tricks with soybean, and some rather tasty products and breads have been the result.

Also—the usual soft drinks should be banned from all

school premises. Bottled apple juice with no additives is available and is a very healthful drink. So is grape juice.

Visit to an Enclosed Shopping Center

Last Saturday, as it was raining, my wife Anna and I decided to drive out to the Whitehall Mall, at Allentown Pennsylvania, one hundred ten acres of shopping center all under one roof—a veritable city of stores, restaurants, a movie theater, and what-have-you. Our idea was to get in an hour of walking.

There was an enormous crowd there, probably prompted by the rain because the people could go from shop to shop without getting wet.

What interested me most were the six or seven restaurants, with waiting lines in each one to get in. It was about three in the afternoon, and what were the diners consuming? Snacks! Ice cream, cakes and pastries. It was a real Coney Island atmosphere, with the desire for quick-shot sweets uppermost in the average person's thoughts.

Two things can be observed about these gorging people; first, what slaves they are to the sweet habit, and second, what little education has been given them by teachers, doctors and ministers, to show the harm to their health of these sweet foods.

Talking about ministers, they are even guilty of encouraging this crime by holding ice cream festivals.

It is sad to see so many juveniles here downing these artificially sweetened foods, young persons who are at a time of life when they should be building their health instead of ruining it, sitting there with the approval of their elders, creating such a serious imbalance in their blood, a condition that will keep them sugar-confused for the rest of their lives.

Women, Arise!

Robert Peterson, who runs the column "Life Begins at Forty," syndicated in many newspapers across the country, said on April 22, 1962:

> Someone has sent me a sixty-four page booklet entitled *Sugar—The Curse of Civilization,* which starts off with the blunt assertion, "The practice of eating sugar deprives the body of essential vitamins."
>
> In the lengthy essay—documented with bits and snippets from research studies by scientists whose affilia-

tions sound impressive—a possible relationship is suggested between use of white sugar and a host of human ills ranging from arthritis and cancer to stomach trouble and juvenile delinquency.

One might be inclined to dismiss the article as bunk except that the writing is extremely good and the author is J. I. Rodale, who publishes a monthly health magazine with a paid circulation in excess of 400,000.

Rodale claims it is fallacy that one must eat sugar to gain energy. He calls white sugar a drug to which Americans have become addicted and says that if housewives knew the full story of cane and beet sugar, "Mrs. America would not only change her mind practically overnight about white sugar, but would march in a body to Washington and fight for legislation to make white sugar illegal."

Dr. Cesare Lambroso

About forty years ago one heard a great deal about Dr. Cesare Lambroso, the famous psychiatrist-criminologist who died around 1909. According to him you could tell a criminal by the shape of his face, head and other parts of his body. But the conservative medical world considered his ideas erratic and bizarre. In fact his own behavior was erratic and bizarre.

Today, you no longer hear the name Lambroso mentioned, because his theories have been completely refuted —Lambroso claimed that by studying the eyes, ears, nose, mouth, pelvis, abdomen and limbs of a person, you could correlate them to physical types and specific crimes: For example, if the mouth is fleshy or swollen or protrudes, there would be a tendency to be a murderer or rapist. Then straight lips indicate a bent for swindling.

This was great stuff for the newspapers and magazines of Lambroso's time, and they ate it up, but the police found men who looked as if they should be college professors killing women by twos, threes and fours—chain killers, so to speak.

There has been an enormous change in the appearance and body build of people since our diet has become emasculated, and since the consumption of sugar has increased.

Are They Boys or Girls?

In *Modern Nutrition* (Vol. 7, No. 2) appeared an article with pictures. The pictures were shown at an American

Medical Association Convention. The participants were supposed to guess which were boys and which were girls. Doctors had a 20 per cent record of correct guesses, nurses 30 per cent, educators 50 per cent, the average for all being 30 per cent.

Experimental work with animals shows a loss of secondary sexual characteristics after two or three generations on an impoverished diet. Males lose their heavy masculine frame, their make-up beginning to resemble the female. Females also tend to lose their distinguishing build so that both sexes approach a state of physical neutrality. The male no longer has the strength of body that normally makes him the breadwinner and dominant personality. The female no longer has the pelvic capacity required for easy child bearing. Other undesirable changes go along with these among individuals of either sex.

Observations among our young people shows that humans become subject to the same deficiencies as a consequence of depleted foods, used since the roller flour mill was invented right after the Civil War. Canning, pasteurizing, and refinements of many kinds have contributed to the heredity breakdown. The increase of the use of white sugar no doubt is also a contributory cause.

You will notice the uniformity of build between boys and girls if you attend any "hippie" or "beatnik" gathering.

Can We Change the Character of our Youth?

Dr. Raymond Pearl of Johns Hopkins University thinks we can do it in a few generations. Evidence which I have presented thus far in this book shows that it might be accomplished in a matter of months, in same cases.

Dr. Raymond Pearl, in his famous book, *The Biology of Death* has this to say:

> Attempts at social control of the germ plasm—the innate inherited constitutional make-up of a people—by eugenic "legislation" have not been conspicuously successful. . . . As an animal breeder of some years' experience, I have no doubt whatever that almost any breeder of average intelligence, if given omnipotent control over the activities of human beings, could, in a few generations, breed a race of men on the average considerably superior—*by our present standards*— to any race of men now existing in respect of many quantities or attributes.

Dr. Pearl does not mention nutrition in his method of control over the activities of human beings. But his book was written in 1922 when the knowledge of nutrition was nothing compared with what we know today.

I would say that in one generation we could produce a race of youth of unusual intelligence, strength and health; we could then turn many prisons into universities; we would be able to walk safely in our parks at night; our taxes would be lower; there would be more honesty in the land.

CHAPTER SEVENTEEN

A Candy Columnist

IN THIS CHAPTER I would like to give a few examples, items that have appeared in the public prints, showing how uneducated many writers are about the effect of sugar on our bodies and minds.

Robert C. Ruark, a columnist writing in the *St. Paul Pioneer Press* for December 3, 1957, came out bravely for candy eating, at a time when pretty nearly every intelligent person feels that this is one of the worst blunders of our modern diet. I just can't imagine the barrage of letters that came towards Mr. Ruark. Guiltily he refers to "all this doctor-interference in man's natural tastes." Then he adds that a doctor or a dentist is, after all, only a kind of plumber-carpenter who works on the human frame and is subject to mistakes like all of us. In other words, Ruark belittles the doctors and dentists who frown on the use of white sugar.

This kind of writing will certainly make the candy manufacturers happy. But the proof of his own pudding lies in one statement in his article. He says, "The worst-nourished people I ever knew are Central Africans, and I never saw one that didn't have a magnificent set of sparkling, uncavitied teeth." Yes that's because they don't eat candy. Ruark had referred to them because they did not eat a scientific diet. But fortunately for them, their primitive diet, which is a matter of forced circumstances, happens to be

more scientific than ours. They do not have any food factories.

A Doctor's Unsound Dietary Advice

Here is something from Dr. Harold Thomas Hyman's newspaper column called "The Well Child" which deals with the sick child:

> Unless your doctor gives contrary orders, offer the youngster party foods, such as sugared cereals, griddle cakes or waffles with honey or maple syrup, chocolate flavored milk, cocoa with whipped cream, bread or crackers with jam or peanut butter, sliced banana, ice cream with syrup, pudding with caramel sauce, cookies, lollipops, candies and the favorite carbonated beverage.
>
> I hope the family doctor will give contrary orders.

Drive Safety by Not Eating Candy

I quote from a publication called *Premium Merchandising* (December, 1966):

> An Evanston, Illinois, car dealer—Humphrey Chevrolet, Inc.—recently introduced a new promotion: giving each customer a package of candy along with a booklet entitled *How to Drive Safely and Fight Fatigue by Eating Candy*. The booklet, published by the National Confections Association, explains that when tired, a driver's blood-sugar level is low. Candy quickly raises the blood sugar and fights fatigue. The publication also contains some safe-driving tips.
>
> James L. Sorensen, vice president and general manager of Humphrey Chevrolet, Inc., said, "We at Humphrey Chevrolet are delighted to be able to launch this 'drive safely by eating candy' promotion for many reasons.
>
> "Candy not only furnishes a quick pick-up for the drivers; it also relieves monotony, drowsiness, tension and fatigue for passengers. Thus, we feel that candy should be considered as a safety factor as well as a nourishing food supplement."
>
> Humphrey Chevrolet has already given away 1,000 of these good-will gifts, with surprisingly good results. Most customers are delighted to receive something unexpected and are quite fervent in their thanks.

Will someone please send a copy of this book to Humphrey Chevrolet, Inc., of Evanston, Illinois? In writing them,

please advise that candy eating contributes to a tendency in a person to confuse his mentality and make him doubtful as to who is the real owner of a car.

Giving Candy as a Reward

We have often seen doctors and dentists who give candy to unfriendly young patients, thus starting them on the downward path of malnutrition, but in Missouri there is a project of giving candy rewards to school children that is unbelievable.

The program, called Northeast Children's Project, has been founded by a team of young educators and psychologists from six states, and includes children who are two or three years behind in school. The school is in an urban poverty area, a Negro ghetto off the Missouri River.

They claim that the project has resulted in a remarkable improvement in the youths, the children in the program averaging a one-point increase in their grades, and tripling their output on an achievement test.

How was this accomplished? It was like giving a lump of sugar to a tired horse, who will whip up speed for awhile.

"If the student does well," says Dr. Girardeau, who adapted the system after working with retarded children, "he is given points which can be used to buy candy, toys or food at one of our stores."

As I have shown, boys have also committed crimes in order to get the money to buy candy.

This project is heavily subsidized by the federal government ($140,000), but how many students are in it? There are twenty elementary school children, and about twenty-five pre-school youngsters. For $140,000 can you imagine the meals that could be furnished for fifty times these forty-five children? This would be a program for which there is adequate evidence that much better results would be obtained than giving pre-school children the candy habit.

The Food and Drug Administration's Attitude on Sugar

In 1963 the Food and Drug Administration was trying to put over some new regulations to throttle the health-food business. I submitted a long brief in an attempt to discourage such action, and at one point I suggested that there is evidence there is a connection between a high refined carbohydrate diet and juvenile delinquency.

In his comment on my comment Commissioner Larrick of the Food and Drug said, "Relating juvenile delinquency to a high intake of refined carbohydrates is highly speculative. No recognized nutrition authority would agree that there is a foundation for such a thesis."

No recognized authority would agree, says Larrick, but there *are* authorities, as you can see in this book, and there is evidence—mountains of evidence. But many persons' eyes are shut to anything smacking or smelling of nutrition as a cause of anything.

A Medical Organization

We wrote to a certain medical organization describing the plan of this book, thinking we might get some encouragement. We will give you their answer so that you might see their attitude. We don't think it would be fair to them to give their name, in fact I am sure it would antagonize them.

On the other hand, I feel that if they were to read this book they might change their opinion. Here is their letter:

> Dear Mr. Rodale:
>
> Thank you for your October 5th letter. Your book relating criminality to diet with particular reference to sugar intake is an excellent idea and an area which needs attention. We have some convictions along these lines. However, it would be difficult to dig out of our files material which might be termed documentation for this point of view.
>
> Since hypo-adrenocortics may suffer from considerable emotional disturbance, their behavior, particularly in the juvenile stage, may sometimes be in the delinquent class. Assuming as we do that alcoholics and drug addicts are suffering from hypo-adrenocorticism, it is obvious that much crime to support these expensive habits may in a sense be attributed to their basic hypo-adrenocorticism and can be overcome by proper treatment.
>
> I doubt that there is any reasonably direct connection between hypoglycemia and criminality. The hypoglycemic may be nervous, upset, unable to think clearly or consistently, be confused, unhappy, and unwell, but all of these things would have only an incidental relation to crimes committed by such people.
>
> We would be very much upset should a book such

as you propose attach any stigma to the hypoglycemic or infer a relation between hypoglycemia and criminality other than the indirect one which may result in some anti-social behavior on the part of children and some criminal actions on the part of alcoholics and drug addicts.

In any event, we will always be glad to be of assistance if possible, and would suggest that the relationship between hypoglycemia and accidents is more direct than any relationship to criminality per se.

Hypoglycemics by and large are above-average in intelligence. They tend to be perfectionists; they drive themselves and accomplish great things, albeit at terrific personal cost. I am sure that criminality among hypoglycemics is no more than among the average of the population and probably less due to their generally above-average intelligence and drive as indicated above.

Nutritional Reward

In New York City there is a school for emotionally ill children which is part of Bellevue Hospital, called Public School 618. The pupils, who are from five to eighteen, storm the classrooms at 8:30 a.m., and write essays like "What I Would Do if I Were God." They do woodworking, study science in well-equipped science laboratories, sew dresses, take remedial reading courses, and so forth. And, says the *New York Times,* "Very often the end of a successful lesson calls for a lollipop; a favorite form of treatment." Seal trainers reward their wards in a more nutritionally scientific manner.

Lollipops and Polio

The Allentown *Morning Call* (June 17, 1955) said:

Lollipop Boom: Overnight a boom in the candy of the kids burst into full bloom several weeks ago.

Why? The polio vaccination program. In nearly every area around the country, youngsters have been given lollipops along with their shots— to keep their minds busy and their tongues quiet. Hundreds of thousands of shots . . . hundreds of thousands of lollipops.

Davy Crockett set off the sensational upsurge in coonskins; Dr. Salk set off the sensational demand for lollipops. In these tiny tales are reflected two of 1955's most dramatic stories.

Note: See Chapter Five of this book, the section on Dr. Sandler, who found that sugar was one of the causes of polio.

Sugar Makes Money for Schools

In its May, 1960, issue, *The Journal of the American Dental Association* carried a report which is hard to believe. It said that in the previous month the Board of Education of Chicago decided to ban the sale of candy and carbonated beverages in some of its schools as a test.

It took this action because one of the board members, "a highly qualified and nationally known pediatrician," had referred to refined sugar as being empty of caloric value. "The best you can say for such foods is that they are non-essential and sometimes actually harmful."

But there was one dissenting voice, the school superintendent, who showed that in 1959 Chicago schools had sold $170,443 worth of candy, with a net profit of $61,704. Think of it; they charged the kids 2½ times the cost of the candy!

The superintendent was reported to have said, "Though the food might be empty, their elimination at this time would disrupt the financial, personnel and other administrative details of the luncheon program.

The dental journal's comment was, "The superintendent's reported attitude is found all too frequently among the nation's school boards, administrators, and even parent-teacher associations."

The fact of the matter is that the schools can make money by selling healthful foods—health non-sugar (not no-cal) candies, apple juice that is sold without preservatives, and fruit—there are apple-vending machines.

School Dereliction in Nutrition

In the Long Island *Daily Press* of Sept. 4, 1958 is a picture of Valley Stream Central High School principal, Edward J. Kurfess, sampling a cup of ice cream made by the school districts new ice-cream-making machine. The paper's account says that ice-cream portions are bigger and better at the school, that 5,500 students are getting "heftier servings of richer ice cream," and that the school district is making less than twenty-nine flavors.

"And for an investment of $7,000 in equipment, it ex-

pects to save at least $6,000 a year against what it would pay a commercial distributor."

This is a sad commentary on our system of teaching health in our schools. It would be much better if the school district would work out a frozen fruit cup instead of ice cream. I like the fact that the school district is making an item of food itself. Why can't the school district rent some land and grow vegetables organically for use in the school lunch rooms? Now that this district has broken the ice with its ice-cream-making project, why not go deeper into the food producing business?

Soda Pop Commercialism

Talk about the effect of commercialism on our welfare! A reader sends me a clipping from the *Pittsburgh Post-Gazette* (September 16, 1961):

> ARENA ADOPTS SOAK 'EM POLICY
>
> If you're planning to take youngsters who get thirsty to public Auditorium events, you'd better take along a canteen of water or be prepared to buy pop.
>
> There are no drinking fountains in the $22 million hall. They were purposely omitted.
>
> "We had drinking fountains and bids on them," an authority architect said, "but they had to be taken out because the concessionaire wants to sell pop."

Parents of juvenile delinquents: Write a letter to your Congressman. Many of these public buildings are being built with federal money.

The Authorities Don't Like Nutrition

A medical writer in *The Oxford Medical School Gazette* (Michaelmas, 1961) said: "No respectable physiologist is allowed to think that nutrition is important." In fact, according to medical practice, the general nutritional state of a patient is judged by whether he is over- or underweight. (*Medical Journal of Australia,* Dec. 16, 1961, page 995) And this philosophy is also echoed in the lower echelons of medical practice, as reflected by what a *head nurse* in a hospital recently said. I quote: "Any mention of nutrition makes me sick to my stomach." In the eyes of science, to be really concerned about the effects of bad nutrition classes you at once as a food faddist, and the average American, in worshipful reverence to the sacred cow of science, goes along with this concept.

They Say Sugar is Good for You

According to statisticians of the Food and Agriculture Organization of the United Nations (*The N.Y. Times*, April 23, 1960), the world was a far sweeter place in 1959 than it was in 1949. Sugar made the difference. Its output doubled from 1949 to 1959.

"Given favorable circumstances, the F.A.O. experts contended, many millions of people, particularly in underdeveloped countries, almost certainly would reduce their intake of traditional grains and other foods in favor of adding at least a bit of sugar to their monotonous diet."

Candy at the Waldorf

At the Waldorf Astoria Hotel in New York, a well-dressed mother was urging her little boy to eat more chocolate. I heard her say, "See sweety," as she held up the chocolate bar, "why don't you want to eat anymore of this? It's so good!" She was very overweight. I don't imagine her dentist ever told her that eating chocolate bars was one of the causes of cavities. He probably has saturated that child's teeth with the external fluoride treatment.

But it is unbelievable that a woman who has money enough to stop at the Waldorf would not be informed about one simple admitted fact that sugar is one of the worst things a child can eat, not only for its effect on the dental health, but for its threat to the general well-being of the body. It just goes to show the general ignorance of the public on the subject of the simplest health facts. And who is to blame but the M.D.'s to whom this woman has gone from time to time when her little boy was sick, which was no doubt often due to the unhealthful foods which his mother made him eat. But the little boy said, "No!" He didn't want any more chocolate. He was more intelligent than his mother. Good little boy! Continue to oppose your mother every time she shoves a chocolate bar in your face.

P.T.A. Snacks

I gave a talk to the P.T.A. of a school that two of my grandchildren attend. The subject was "What is Wrong with School Lunches." The results were excellent. I believe I improved my audience's conceptions of a healthful diet—in fact, so much so that I was asked to suggest some safe type of snacks to be used as refreshments after each meeting.

Later I went to an affair at this school, and as part of

the refreshments there were stewed prunes, a toothpick mounted on each one. Raw prunes would have been better, but at such an affair people will rather go for the stewed prunes on a stick. Other things I suggested were dried fruits, sun-dried, not treated with sulfides. Apples sometimes can be purchased at quite reasonable prices. Raw fruit should always be part of the refreshments, and no sandwiches. Include raw nuts—no salt and no roasting. In the health food stores there are many safe and wonderful snack items. One I recently found was cellu-soy nuts—unsalted. There are health candies sweetened with honey. Cold meat could be the backbone of such refreshments, but not any of the preserved meats.

Book: Sweet Without Sugar

The *Dental Digest* of December 1956 says: I know at first hand something about the power of the sugar interests, and how adroitly they operate. My wife and I prepared a cookbook, *Sweet Without Sugar,* that gives recipes for desserts and other dishes that may be prepared without the use of refined sugar. The foreword was written by our family friend, Barbara Eisenhower, the former President's daughter-in-law.

Two of the largest book publishers in the United States were eager to publish it until they talked with their front offices where subjects of dollars and business are discussed. In both cases they turned away from publication. In one case the managing editor stated honestly that he did not wish to offend the sugar-candy-soft-drink-ice-cream-bakery interests. Nowhere along the line were there questions of bribery or coercion involved, no threats of boycott, no strong-arm tactics. It was a matter of business judgment not to offend interests that operate in billions of dollars a year.

I doubt if the sugar-using industries were even asked their opinions of such a cookbook and I am quite sure that the publishers did not show them the manuscript. I am not accusing the sugar interests of exercising any form of *direct* censorship, restraint of freedom of publication, or pressure. Subtle forces are always more effective!

The only reason for pushing this personal experience into the light is to show that the $350,000 annual ad-

vertising campaign of the candy-making industry will be smooth and subtle. No controversy, no direct attack, no taking issue with scientific statements, no offense intended.

Sugar for Prosperity

The *Wall Street* Journal in early 1957 said:

"If the candy makers' campaign boosts national candy-eating habits, it also will benefit the Agriculture Department's efforts to get rid of farm surpluses. Latest industry figures show that candy uses up about $476 million worth of farm goods a year, including 771.5 million pounds of corn products, 390 million pounds of milk, 6.6 million pounds of eggs, and 173.6 million pounds of nuts and peanuts." Note well: The word *sugar* is not used.

See how it may be done: "Eat Candy for Prosperity." No mention made of tooth decay or obesity, of depletion of vitamin reserves, of disruption of mineral balances. Good business, first; good health, second.

Unbelievable Anecdote Concerning a Sugar Man

There is a publication of the sugar-refining industry called *The Molecule,* which in its Spring, 1955, number has an item by a staff writer of this publication which says:

> A number of years ago at Battle Creek, the citadel of diet fantasies, a young dietician inquired why I was using cane sugar on the table instead of the gummy-looking maltose, which incidentally sold for about twenty-five cents a pound. When I asked why not, she said that cane sugar would not sustain life. I replied that she was entirely wrong, because it had always sustained my life—it was the only business in which I had ever made money.

This undiplomatic statement (boasted of in print) certainly is not a good advertisement of the power of cane sugar to nourish the mind.

The fact that white sugar cannot sustain life can be proven by a simple experiment that any high school boy or girl can do. You apply a lighted match to a cube of sugar and it will melt, not burn. But smear some cigar or cigarette ashes on the sugar and it will burn. The sugar is non-mineral. It is merely a formula of carbon, hydrogen and oxygen, and the formula is always exactly the same.

The cigarette ashes are almost pure minerals. To burn or to metabolize anything there must be minerals present. Thus in the intestinal system refined sugar poses problems in connection with being absorbed.

CHAPTER EIGHTEEN

Employee Dishonesty

IN THIS SECTION I will present a few items to show that by industry's apathy towards the solution to the crime problem it will eventually make it pretty difficult to make a profit. To protect itself, it must step into the picture; it must become directly involved.

Take the case of employee dishonesty; it is getting out of hand. We can not center our attention on juvenile delinquency and overlook the delinquency of the general population. According to Norman Jaspan, president of Norman Jaspan Associates and its fact-finding division, Investigations, Inc., there is a shocking increase in employee dishonesty by college graduates who are in American industry.

Mr. Jaspan gives all kinds of high-flown reasons for this, but overlooks the diet of the average college student. Isn't it tragic that our revered seats of higher learning should not be able to understand that we are what we eat? In fact I have tried to bring this subject to the attention of some of my collegiate friends, with very little success. They think *I'm* sick!

Shoplifting in England

In Bournemouth there have been so many cases of shoplifting by juvenile girls that the prosecution issued a statement. April 29, 1965: "Store owners feel that if this type of offense cannot be controlled they might have to impose an embargo on those under sixteen entering the premises unless accompanied by an adult."

On one Saturday afternoon nine girls were discharged conditionally, and one other remanded for two weeks for

medical reports. But I'm sure they will not have a blood sugar done on her.

It seems rather poetic justice that the very stores the girls rob sell sweets in any quantity to any child who will buy! I wonder if any of these girls stole sweets.

Shoplifters' So-Called Motivations

According to *The Lancet* (London), September 18, 1965:

> The wide prevalence of shoplifting, its rapid increase (from about 18,000 cases dealt with in magistrates' courts during 1960 to 25,000 in 1963), and its growing popularity among young people lend interest to a recent investigation carried out in Salisbury, Wiltshire . . . where juvenile convictions went up from six in 1963 to thirty-one in 1964 . . . Suggestions for discouraging juvenile shoplifters included less ready access to goods, reporting to head-teachers, and enlistment of public opinion. The motives for juvenile shoplifting were considered to divide the culprits largely into two categories: those who did it for a "dare" or for thrills, and to emulate others; and those who did it for psychological reasons, such as deprivation of affection or protest against too-strict parents. Both in children and adults, need for the stolen articles was a negligible influence.

When the doctor says that the "need" for the stolen articles was a negligible influence, it reminds me of something that happened on a roof of a slum tenement in the Lower East Side of New York, somewhere around 1906. I was on that roof looking at something a young boy had stolen somewhere. I knew him to be a bad boy.

Suddenly his mother appeared and berated him for having stolen the article. "What did you need it for?" she shouted, which led me to believe she might have condoned the theft, had the boy stolen something worthwhile.

She did not give him a lecture on the sinfulness of stealing. But they were a poor family, and probably living on a diet much too high in starch and sugar which are low-cost calories and filling.

I like the last item in *The Lancet* article:

> The chief gain from this investigation may be its encouragement of a sense of community involvement in the problem. Shoplifting, like many other antisocial

habits, may best be prevented and dealt with by increasing the sense of "us" and breaking down the barriers between "me" and "them."

The Government Encourages Sugar Use

The *Consumer's Bulletin* of August, 1961, has the following to say:

> A federal governmental research agency recently reported discovery of a new process for the preservation of cream by addition of sugar (about 30 per cent) as a means of saving the expense and space of processing and freezing. The announcement suggested that the sugar-preserved cream in sealed tins can be stored for months at 60 degrees or higher, and said that even after the tins are opened, the sugared cream can be used without refrigeration for at least a week.

Hoodlumism

I have been reading that the business slump in the New York ocean-side resort of Coney Island has been growing more serious. According to the *New York Times,* "Empty roller coasters and deserted bingo parlors are attributed by concessionaires to 'bad publicity,' unsafe subways are tied in with hoodlumism."

But do the concessionaires stop to consider that the horribly refined sugary foods they sell to the teenagers on the boardwalk are an important contributing factor to juvenile delinquency? Ice cream, sodas, candy and such, on which young people make whole meals when they go to Coney Island, are diets which create imbalances in the blood stream and show confusion in the thinking.

Businessmen in general should be aware that their business will suffer more as delinquency increases. It is getting so bad in many cities that soon people will be afraid to leave their homes at night. Then what will happen to restaurants, theatres, and other businesses that depend on night trade? These groups of businessmen should band together and set up an organization that will study the nutritional cause of juvenile delinquency, and see if some way can be found to improve the nutrition of the young.

And please, don't put this problem in the hands of the psychiatrists. They have had their chance and have failed miserably. Under their tutelage crime is increasing from year to year.

Listen to this from psychiatrist Jack R. Ewalt of Harvard University, president of the American Psychiatric Association. "The world is a kinder place than it was formerly." He claims that violence is less rampant. But, he says, "The attack on President Kennedy has called attention to a serious problem that confronts all public officials. It is the threat or act by people who have 'tenuous control' over their aggressive urges."

I don't know what the man is talking about, that is, in relation to our problem.

But *Science News Letter* (May 16, 1964) in summing up says, "Dr. Ewalt also urges his fellow psychiatrists to work with jurists, law-enforcement agencies and sociologists in getting at the underlying causes of crime on a local and a world-wide basis."

Why not throw in a few nutritionists? They couldn't make the situation any worse.

What Crime Is Doing To Insurance

In the *Wall Street Journal* (July 28, 1965) appeared the following:

> But for the nation's casualty insurance companies, crime—or, more specifically, the selling of policies that protect customers against it—assuredly does not pay. Publicly owned casualty insurance companies paid out $104.60 in claims for each $100 or revenue they took in burglary and theft policies in 1963, the latest year for which figures are available. The $4.60 underwriting loss contrasts with the $4.90 profit the companies made on such policies in 1956. Figures for 1964 and 1965 are expected to show even higher underwriting losses."

I should imagine that the insurance companies should be the first to investigate this new theory that wrong diet is at the bottom of crime causation. Some large organization should start a battle fund, and those who are losing money in the burglary insurance business should be the first to contribute to it, for they would be the first to benefit.

And don't overlook the small businessman and householder who are paying inflated rates for burglary insurance.

Higher Taxes for Crime War

The average businessman must interest himself in the crime solution situation. Today his attitude is that we must depend on the authorities—the police, congress, psychia-

trists, educators, the President's Crime Commission. But their reports are usually just more of the same.

In the meantime taxes to combat the increase of crime and study how to curb it are going up year by year, and the businessman will have to pay.

The *N. Y. World Telegram* under date of April 23, 1965, quoted Mayor Wagner as opening a war on crime. He estimated the cost of the attack of crime in the streets at nearly $17 million a year, and $9 million more for subway police.

"We will have to have some new taxes," he said. And there will be more and more increases of taxes.

We must make a start, in the schools, from the kindergarten to the colleges—on a nutritional basis. We must reorganize completely the kitchens of our prisons. The churches must enter this campaign, and the business people must speak nutrition to their employees.

Sabotage in Factories

Willful damage in factories by employees presents a bigger problem than many firms will admit, says the *Wall Street Journal* (December 13, 1966). They find "sand in a delivery truck's gas tank, a piece of metal to jam machinery and a faulty assembly job," and it is increasing every year.

Many firms have employed detective agencies to find the culprits, but "though saboteurs often are discharged, few are prosecuted. 'We usually advise clients, for their own protection, not to file charges,' says Leonard S. Lowell, chairman of Dale System Inc., an investigative and security agency. 'Most saboteurs aren't criminals in the usual sense. They have no criminal records and courts often are lenient with them."

No, they are not criminals, but probably their blood sugar is on the low side.

Crises for the Retail Trade

The following disheartening item appeared in the *San Francisco Examiner* (February 25, 1967):

> The other day the head of the city's biggest drug store chain reported that in 56 weeks his stores suffered 62 burglaries and 31 armed robberies. Money losses were $116,000. But the terrifying feature was violence to employees, one of whom was kidnapped in his

home, forced to reopen the store, then pistol-whipped to unconsciousness. The chain can stand the losses, but smaller businesses have to shut up shop and quit.

Burning Sugar Cane Fields

Recently my wife and I spent about a week on the island of Antigua in the Caribbean. Antigua is practically 100 per cent colored, and I enjoyed observing the people as they lived their lives outside their houses and on the roads. I still have a pleasant memory of a two-hour walk on a country road, watching the natives moving along, carrying loads, cutting firewood and such. There were outward signs of poor nutrition, the people guzzling colas, ice-cream, and the other starchy and refined foods of civilization.

At the time we were there, there was an epidemic of burning down sugar-cane fields by the natives. This could be due to mental confusion caused by the poor diet. The natives don't seem to recognize the fact that they are destroying a means of making a living!

There were two items on one page of a local newspaper which seemed to be related. First there was a headline: "Sugar Cane Fires Can Result in Mass Hunger." Here was a second item: TREES MAY COME TUMBLING DOWN.

> Some of the tall, attractive coconut trees at Barbados' Welchman Hall Gully may soon come tumbling down much to the regret of members of the Barbados National Trust.
>
> But the dry coconuts which fall from the trees could cause injury or even death to a visitor to the gully, Mr. Frank Hutson said at the trust's annual general meeting yesterday.
>
> Members discussed whether it would be better to cut down the offending trees or get the nuts picked, but it was pointed out that Barbadians today are not so keen on climbing sixty-foot trees as they used to be.

This last item is significant! The natives today don't have the physical and mental development necessary to climb sixty feet into the air and maintain their balance. This is true of the Antiguans as well as the natives from the Barbados. Many of them are obese. But it was different years ago.

CHAPTER NINETEEN

The Psychiatrist

IN CONNECTION with the most pressing social problem of our times, namely drive, it is the psychiatrist who is looked up to for guidance. It is the psychiatrist who is called in as the doctor. It is the psychiatrist who has infiltrated all the mental health groups and is directing their thinking. For fifty years we have watched the mounting, year-to-year increase in the rate of crime, and still we continue to have the utmost faith in the psychiatrist as the one who will deliver us from this plague. To me it looks as if this problem is in the hands of the wrong people.

Psychiatry is a confused science. In fact Dr. Percival Bailey, Director of Research for the Illinois State Psychiatric Institute, a psychiatrist himself, said that by no stretch of the imagination can psychiatry be considered a science. He calls it a pseudo-religious faith.

Another doctor (Elliott Manuel) associates it with a "wish of people to improve themselves, the need for a faith to replace religion." In fact he says, "The psychoanalytic movement began in the atmosphere of a persecuted religious minority or a revolutionary political party . . . a small group, kept under constant pressure from the outside world."

Rampaging Juveniles

During Labor Day weekend a few years ago, police fought hundreds of rioting juveniles, many of them college students, who staged an end-of-the-summer rampage on and near the boardwalk in Atlantic City, breaking windows, vandalizing cars, and hurling ash cans. In one place a group tried to overturn a car with six persons inside, but were stopped just in time by the police. Twenty-eight young people were arrested.

No explanation was offered by the police for the rioting, except possibly some drinking. But they always overlook that insidious kind of drinking which has been going

on for years before these boys and girls reached that boardwalk—the cokes and other soda pop.

Can you imagine the diet of these youngsters on a beach boardwalk for a two- or three-day holiday? What do they eat and drink? As they rove about and gorge themselves on ice cream and other crazy-colored foods available on boardwalks they are not hungry for regular meals.

We must not overlook the fact that before these youngsters came on the boardwalk there preceded them a lifetime of carbohydrate-accented nutrition. The weekend was the last straw. It is about time the authorities woke up to what is at the bottom of these rampagings as well as the multiple murderings that are occurring, and not leave it to the psychiatrists to find the solution.

The Character of the Psychiatrist

The psychiatrist knows nothing of nutrition. He knows nothing about hypoglycemia. He knows very little about general health, but he knows a lot about Freud. However, the world is beginning to wake up to the incompetencies of psychiatrists. Thus the *Cambridge University Medical Society Magazine* (Lent issue-1961) said, "The subject of psychology seems to be especially designed to enable those who do not understand themselves to understand others." Psychiatrists are known to be notoriously inefficient in handling their own affairs, especially their marriages.

The psychiatrists themselves criticize what they are doing. At the annual meeting of the British Medical Association in 1960, Dr. E. B. Straus, president of a psychiatric organization, a practicing psychiatrist, referring to psychiatrists in general, said they are almost as mixed up as the people they seek to help.

In an interview that was quoted in newspapers all over the U.S. on June 15, 1958, J. Edgar Hoover said, "The youth crisis today has been nurtured to a great degree by the theories of muddled sentimentalists, and confused psychiatrists. . . . I repeat, confused psychiatrists. . . ." Hoover ought to know as he has worked so much with them.

In the eye of the public the image of the psychiatrist is not good. On the stage he is a common butt for jokes, and brings derisive laughter. In the public the mere mention of the word psychiatrist brings an amused smile. In Medieval

miracle plays the comic character was the Devil. On Broadway today it's the psychiatrist. There must be a reason!

A psychiatrist, writing in the Sept. 20, 1958, *Medical Journal of Australia* calls the psychiatrist the funny man in medicine. "I once brought the house down in a speech by referring to a conference of three thousand psychiatrists in Zurich. The idea of three thousand psychiatrists was somehow terribly funny."

But, while the public thinks psychiatry is a joke, the rate of crime is mounting alarmingly, and the psychiatrists can't see the joke of it.

On the Rampage in Toronto

From *The Toronto Globe and Mail,* May 18, 1965:

HOODLUMS OR HAVEN?

Repetition of Sunday's violence on Toronto Island in which a group of youngsters were beaten by teenage hoodlums could bring an end to the usefulness of Toronto's $8 million park and recreation center. If thugs and delinquents take over, law-abiding citizens will be quick to abandon the place.

Toronto has had considerable experience with hoodlums of the island variety. The Stanley Park Gang, the Pit Gang, the Beanery Gang, the plaza gangs have tried to take over the streets and parks of Toronto. And Toronto's reply has always been swift and firm police action aimed at crushing violence before it becomes widespread.

An enlightened society has a responsibility to find the causes of delinquency; to poke into the dark and uninviting corners in which the behavioral patterns which give birth to violence are born. This is the proper function of groups like the Ontario Legislature Select Committee on Youth. But the hope that this type of study holds out to solving the problems of delinquency is long term. The immediate problem can be solved only by the police.

Gentlemen of the *Toronto Globe and Mail*: You write as if you have guts. When this book is out we will send you a copy. Perhaps you might have guts enough to pioneer the new nutritional approach to the crime problem in Toronto—and please be sure to bypass the psychiatrists.

Psychiatry on Trial

A few years ago a business associate of mine had a

nervous breakdown. I went to see his psychiatrist to see if he was considering the factor of nutrition in handling this man's case. When I mentioned the fact that nutrition could be a factor in such cases, I was not prepared for the reaction which occurred. The psychiatrist was seized with a terrible pain. An agonized expression crept into his eyes. He looked at me as if I were one of those who was a psychriatrist-baiter. Then he managed a sickly smile and said, "You're not serious."

The whole trouble is that outsiders do not know really what is going on in psychiatry, for the psychiatrists keep no statistics. Nobody knows what results they are achieving. Where are their statistics of cure? You will never see any because there aren't any. Nobody knows who or what they are curing. The public has the idea that they are producing miracles. But who knows the true facts?

Dr. J. A. Gengerelli of the University of California in an article in the *Saturday Review* some time ago, in attacking psychoanalysis, said, "Were astronomy, physics, chemistry and biology to endure such casual and uncontrolled fact-gathering and such known deductions from facts collected and checked so casually as Freud did, the imposing structure of twentieth century science would hardly exist."

And these are the people who are trying to hold back the tide of juvenile delinquency. The psychiatrist is just not interested in nutrition—period! If he were to decide to learn the latest developments in this field he would have to go back to school; he would have to start from an elementary beginning; he would have to repudiate Freud, who worked at a time when little was known about nutrition.

Rampaging Baltimoreans

On October 9, 1966, Baltimore won the baseball World Series, and there resulted a riot by shrieking young fans who lost complete control of themselves. They became a roaring, screaming mob.

They turned over cars, and caved in the roofs and hoods of others. Signs were torn down, fire hydrants opened and their streams played on crowds. The police had to be called out.

These sorts of demonstration are normal. After all, how often does Baltimore win a pennant? But what is not nor-

mal is the increasing violence of these riotings. And the violence will increase as time goes on . . . unless . . .

The Psychiatrists Not the Ones

I feel that the psychiatrists must be weaned away from the juvenile delinquency problem. The blind cannot lead the blind, nor can the confused lead the confused. In a psychiatric publication I read that psychiatry, as it is, is not science nor art, but confusion.

In the *Psychoanalytic Quarterly* (July, 1950) an article states that the two leading psychoanalytic journals over the last ten years contained practically no articles reporting the results of psychoanalytic treatments.

Dr. Roy R. Grinker, Director of the Institute for Psychosomatic and Psychiatric Research and Training, Michael Reese Hospital, Chicago, a few years ago in speaking before the Academy of Psychoanalysis said that analysis has become separated from the biological and social sciences, both in theory and practice, and is isolated from scientific disciplines.

You will find some pretty juicy and fantastic theorizing. In the *Journal of the American Psychoanalytical Association* (January, 1958) appears a thirty-two page article entitled "The Effect of Shedding the First Deciduous Tooth upon the Passing of the Oedipus Complex of the Male." It starts with an observation made by Freud to the effect that the loss of a tooth in a dream *or reality* has the significance of castration in the unconscious of the adult male. The whole article is full of obscene references associated with the loss of a tooth relating it to the male organ.

A typical case cited: A man came to be psychoanalyzed who had a severe castration anxiety. As a child he had shared a room with his mother. One day he shed his first deciduous tooth, and soon afterwards his mother began an affair with a man whom she had recently met, which gave him an overwhelming castration anxiety which the analyst related to the lost tooth.

A psychiatric study for an airline as to why people are afraid to fly came up with the thesis that "non-flyers have a deep-rooted fear of crashing because they are even more fearful of the potential results of sexual relations with strange persons." But naturally the airline could not use the information.

Then there is Freud's classic example of why little Hans,

aged five, was afraid to go out in the street. He was afraid of being castrated by the bite of a horse. To Freud the horse stood for little Hans' father.

Hoodlumism Again

In New York City recently, some youngsters pouring out of the Palm Gardens ballroom on 52nd Street, suddenly began hurling garbage cans at store windows, and soon there was an orgy of vandalism partaken in by over four hundred youths who looted shops and broke five windows.

Over the last Labor Day weekend at Hampton Beach, New Hampshire, ten thousand teenagers rioted, jeering as they stormed the police station, smashing shop windows, throwing stones, garbage cans and beer cans weighted with sand at the police. Over twenty persons were injured. The National Guard had to be called out, and finally restored order with fixed bayonets.

The mayor's comment was to minimize the whole thing saying it was merely the exuberance of young spirits. But it has been becoming worse each year.

Psychiatry Terribly Inefficient

Actually, psychiatry is shallow. It sees only what it wishes to see. It knows very little about the physical functioning and needs of the human body. According to psychiatrists any and everything can be resolved and cured by psychoanalysis. There is the case described in a book called *Kathy* by Katherine Homer Fryer (E. P. Dutton, New York). It describes the case of a girl who was near death. She was taken to a psychiatrist who said she was suffering from a psychosis and recommended that she be sent to a mental hospital. She decided to consult an M.D., who tested the functioning of her thyroid gland. He found it to be defective and gave her a thyroid medication. She improved in a matter of hours and in a few weeks she was back to normal.

Dr. Arnold H. Kegel of the University of Southern California has done a great deal of work showing that in many cases where psychiatrists have diagnosed cases of sexual frigidity in women as being due to emotional factors, he has found it to be due to the under-development of a certain muscle called the pubococcygens which lies near the base of the pelvis.

The job of this muscle is to hold up the organs that are located in the lower pelvis, but if there is pubococcygeal

weakness, bladder weakness will result as well as poor muscle tone in pregnancy and poor recovery of muscle tone after delivery. Dr. Kegel has developed a small device called the perineometer, a pressure-registering gauge which is inserted in the vagina. The patient then tightens her muscles. Readings above twenty show that the pubococcygens is healthy. If it is five or less there is work to be done on the muscle.

The patients practice with the perineometer, and usually, in time, the muscle tone improves and the reading on the instrument become progressively higher. At his clinic at the Los Angeles County General Hospital, 65 per cent of Dr. Kegel's patients have been cured of sexual frigidity. Yet if these women were to have gone to psychiatrists they would probably have been told, after years of expensive analysis, that their frigidity was due to a father-fixation or to some other similar nonsense.

Violence in Big Cities

The lessons of unchecked violence are no further away than the large metropolitan centers of the United States. Philadelphia recorded a murder a day for the first thirteen days of 1965. New York police instituted dog patrols in subways after a gang of youths brought the terror of rape and murder to subway stations. Central Park has become a thug's paradise. The situation has become so serious in some U.S. cities that neighborhoods are organizing citizens' patrols and retired military police are being hired to ride shotgun on late night buses. (*Toronto Globe and Mail,* May 18, 1965.)

Psychiatry Ignores Nutrition

On the subject of psychiatrists being the watchdogs over juvenile delinquents, I see a continuous lack of interest on their part, in the dining room as a factor in the causation of juvenile delinquency. They continue operating in their rut, writing articles which only tend to confuse the issues. John Crosby said in the *New York Herald Tribune* (May 21, 1962), "The experts in juvenile delinquency are getting to be voodoo priests talking their own mumbo jumbo that doesn't seem to be meaning anything or apply to anything."

Youths Involved in Bus Vandalism

On November 6, 1966, sixteen youngsters, all students at

the Franklin K. Lane High School in Brooklyn, destroyed a bus. All under sixteen, they smashed windows, ripped paneling from sides and top, pushed passengers. A lone detective could not control the teenagers. Ten patrol cars soon were on the scene, plus police reinforcments. Some of the mob were girls.

May I say again that I heard or read nothing like this when I was a boy. We did have street gang fights, but that was even-steven, boy against boy, not boy against the world. And the girls? They were pretty well out of the "violence" picture.

The Remedy Worse Than the Disease

A serious condition exists in psychiatry in which a person goes to a psychiatrist with a minor complaint and comes out with something much more serious. In medicine there are diseases caused by doctors as a result of their treatments, which are known as iatrogenic diseases. *Iatro* in Greek is a doctor; *genic* means caused by. This term was coined by Sir Albert Hurst, a famous British research physician. There are entire books devoted to these diseases. For example an appendectomy can lead to a hernia, the sulfa drugs can damage the kidneys, quinine can cause deafness, and on and on.

Likewise the psychiatrist has coined the word "psychiatrogenic" which means difficulties precipitated by psychiatric treatment. A book on this subject is called *Failures in Psychiatric Treatment* (Grune and Stratton, 1948). In some cases psychosis or insanity has been precipitated by psychiatric treatment. A person might have an underlying emotional problem which is not apparent in his conduct. He goes to a psychiatrist and the psychosis is drawn out. He becomes insane.

Freud was aware of this hazard. When Bruno Walter, the distinguished orchestra conductor, suffered a hysterical paralysis of his right hand in 1906 and consulted him, Freud did not put him into analysis. He advised an immediate vacation in Sicily and in a short time the condition cleared up.

Boys Who Set Fire to Derelicts

When I was a boy and people consumed about one-fifth

the commercial sugar they do today, the younger generation was far less of a problem than it is now. I recall a typical trick the boys in our area of the lower east side of Manhattan would play on drunken derelicts who were sleeping off a binge on a park bench. They would pour water over the pants-fly of one of them so that when he awoke he would think he had wet his pants. They would never do them bodily harm, as far as I know.

But today the boys are constituted differently. According to the *N.Y. Daily News,* (Sept. 21, 1966): "Two boys, twelve and fourteen, were charged last night with pouring gasoline on two sleeping derelicts in lower Manhattan doorways and setting them afire for kicks"!

There were five boys actually involved in these burnings, and according to their parents they were good boys.

Yes! But something subtle was going on in their brains and their nervous systems to prevent them from thinking "good." What was it? I give you one guess—with the ice cream carts on every Manhattan street corner, along with the hot dog vendor with his syrupy, sugary soft drinks, his esmasculated white rolls, and his sodium-nitrated hot dogs.

Psychoanalysis Can Be Dangerous

Psychoanalysis can be dangerous, and it may be unnecessary, but how many psychiatrists today will forego the financial reward of an extended series of treatments? There are some who would, but they are not in the majority.

However, there is an encouraging change of outlook that can be seen which presages the coming of a more scientific attitude towards mental disease. There is the chemical concept. There are medical researches that point to nutrition as an important factor in mental disease. There are rumblings that are encouraging. For example, a book was recently published, *Freud and the Nineteenth Century* (Allen and Unwin, London, 1958), and in reviewing it, *The Medical Press* of London (Nov. 19, 1958) said: "Although most of the contributors are acknowledged Freudians, it is clear from a perusal of the volume that the Freudian honeymoon is over. There is a mood of critical re-appraisal and it is apparent that psychoanalysis as a body of teaching has had its heyday."

As far as Freud is concerned he lost faith in his own

method long before he died. I will give a quotation from *The Canadian Medical Association Journal* (Feb. 15, 1956) in which reference is made to a book by H. W. Puner, *Freud, His Life and Work:*

> The man who founded the discipline which became the sharpest tool in clinical psychotherapy was himself, in the second half of his life, not particularly enthusiastic about its therapeutic benefits. For one thing, as the years passed he lost interest in psychoanalysis as a means of cure, and became much more concerned in its development as a body of theoretical knowledge applicable to the interpretation of cultural phenomena. He came in fact to think of the psychoanalytic method as a way of life, and he was more or less irritated with those of his followers who made extravagant claims for it as a therapy.

Startling, isn't it? Incidentally, three other great psychologists—Alfred Adler, Carl Jung and Otto Rank—have in their writings admitted the limitations of the analytical approach to psychotherapy.

Pupils Attack Teachers

According to the *New York Times,* March 15, 1967, seventy-nine teachers have quit in one Bronx school, blaming attacks by their pupils. There had been physical and verbal abuse, hitting and shoving, none requiring medical treatment. But it scared the teachers no end.

In their collective statement of resignations, the teachers said, "We have sought relief and sent out a cry for help, but no one has answered."

CHAPTER TWENTY

The So-Called Causes of Crime

THE *Richmond Times Dispatch* of January 25, 1967, said:

> Crime is a religious problem and, thus, the whole "correction" process is a religious endeavor, the chaplain for the State Farm told the state's new probation and parole officers yesterday.
>
> The Rev. George F. Ricketts suggested closer contact between them and the institutional chaplains and local ministers. "It should be admitted that there has been very little contact between chaplains and parole officers in the past," he said.
>
> Mr. Ricketts spoke on the second day of a five-day training course the Virginia Probation and Parole Board is giving the seventeen officers it has hired since last February.

No comment!

Science Urged to Fight Crime

According to a United Press dispatch (June 23, 1966), federal crime fighters have appealed to science and industry to aid in the development of modern techniques to fight modern criminals.

The director of the President's Crime Commission stated that the capabilities of science and industry have not been used as they should have to curb crime. I'll say they haven't. Science should be thorough. It should read all the medical literature on crime, even that part that implicates nutrition.

But most of big business cannot be depended upon to be neutral on this matter. Either they are involved in some way in the making of modern food, or they have investments in companies that do.

Robert Lindner, M.D.

Dr. Robert Lindner, consulting psychologist to Mary-

land's state prisons as well as to the federal penitentiary at Lewisburg, Pennsylvania, in an interview reported in *Time* (December 6, 1954), admits that youth today is suffering from a severe, collective mental illness. "Within the memory of every living adult," he said, "a profound and terrifying change has overtaken adolescence." He overlooks the fact that a profound but ignored change has taken place in adolescence's nutrition. He uses all kinds of fancy psychiatrist talk about acting out inner turmoils, the private agonies of a tormenting pre-adulthood, and the abandonment of self and immersion in the herd. He laughs at the application of "social service soporifics," and would probably consider diet a soporific. But as long as adolescence is over-consuming sugar-filled sweets (Dig this crazy teenager's delight—seven scoops of ice cream with chocolate topping!) the private agonies of a tormenting pre-adulthood will continue, and so will the abandonment of self and immersion in the herd, or what have you.

A Plan to Reduce Crime by Controlling the Sale of Firearms

According to the Associated Press (*Detroit News*, August 3, 1966) Representative Don Andrews, California Democrat, in a House speech suggested that President Johnson appoint a scientific commission to investigate the increase in violence and brutality in this country. He had in mind the recent mass killings in Chicago (Speck) and Austin, Texas (Whitman). Such crime, he said has gone up 35 per cent from 1960 to 1965.

"It is time we ask ourselves some fundamental questions," he stated.

I suggest that we should also ask ourselves, is the physical and mental make-up of a person responsible when he goes berserk?

Andrews says that we must not ignore "the incredible availability of firearms."

I say, let us look deeper.

Crime Laboratory Urged

Dr. Albert V. Crewe, physicist and director of the University of Chicago's Argonne National Laboratory, at a seminar on the study of sudden death, suggested the establishment of a large crime laboratory, ten times the size of that operated by the F.B.I.

He said that science had been completely bypassed in the study of crime. What such a laboratory needs, he says are computers, a nuclear reactor for chemical analysis, and communications research, particularly in micro-electronics.

Such a laboratory, says Dr. Crewe, should be staffed with high-class scientists. But he advises that the purpose shall be to create better methods of crime detection. To me this is like whipping the cart instead of the ox.

Dr. Crewe thinks that as the detection of crime becomes more certain, it will act as a deterrent to crime. He overlooks the fact that many crimes are committed by emotionally unbalanced people who are crazed for the moment and don't know what they are doing. Would Whitman have been deterred if he was sure that he would be caught?

What we need is a huge federal laboratory to study you-know-what as a cause of crime.

Ban News of Juvenile Crime

According to the *Des Moines Register* (May 14, 1965), a bill passed by the Iowa Senate would restrict access to news about juvenile crime and delinquency. The *Register* is against such a bill, naturally, being a newspaper and having to have news to sell.

The main part of the bill is to exclude the public from the courtroom. That may be all right! But the press should be invited, to publish these evil things to the high heavens.

The way to cure this delinquency is not to put our heads in holes in the ground.

Ten Rules

Here are ten rules for mental health compiled by the Cleveland Academy of Medicine:

1. Have a hobby; acquire pursuits which absorb your interests. Sports and "nature" are best.

2. Develop a philosophy; adapt yourself to social and spiritual surroundings.

3. Share your thoughts; cultivate companionship in thought and in feeling. Confide, confess, consult.

4. Face your fears; analyze them; daylight dismisses ghosts.

5. Balance fantasy with fact; dream, but also do; wish, but build; imagine, but ever face reality.

6. Beware of alluring escapes; alcohols, opiates and barbitals may prove faithless friends.

7. Exercise; walk, swim, golf; muscles need activity.

8. Love, but love wisely; sex is a flame which, uncontrolled, may scorch; properly guided, it will light the torch to eternity.

9. Don't become engulfed in a whirlpool of worries; call early for help.

10. Trust in time; be patient and hopeful; time is a great therapist.

No comment!

British Crime is Better

It might be interesting to read an editorial item from *The Lancet* (London) April 16, 1966:

> American sociologists explain much of their juvenile crime by the subcultural theories of Cohen and Cloward, and Ohlin, who believe that boys who are prevented by social disadvantages from sharing fully in the American dream of material affluence become so frustrated that they rebel against respectable society. English sociologists, on the other hand, believe that a great deal of child delinquency arises more or less naturally from the basic concerns and social traditions of lower-class culture.
>
> Studies in such diverse parts of the country as Liverpool, Croydon, and Radby all show that lower-class youngsters here have no unrealistic expectations of rising socially or achieving an impossibly high standard of living; hence they are less frustrated than their American peers.
>
> ". . . Downes stresses that it is chiefly the lack of organized adult crime as an alternative avenue to success that has so far prevented us from reproducing the frighteningly high juvenile crime-rates of the United States.
>
> Unless adult crime becomes more organized and more successful (and there are unfortunately a few indications that this may indeed be happening), we need not fear any great expansion of juvenile delinquency. The lesson of his thesis is that we ought to spend a great deal more money and thought on making our police force more effective, and in finding socially acceptable outlets for the energies of footloose urban youths, who all too often drift into delinquency for want of something better to do and someone to care for them and about them.

English vs. U.S. Delinquents

I have been to England seventeen or eighteen times in the last sixteen years; in fact the Rodale Press has a subsidiary company located in Berkhamsted, Hertsfordshire, called J. I. Rodale Co., Ltd., and I have had a chance to observe the young people there.

In the first place they don't have as much money to spend as our prosperity-enjoying American youth do. Then there is far less candy on display in the stores. The British, for example, don't go in for chewing gum, and the latter is more than 50 per cent artificial sugar.

Your average Britisher is more and better educated than his counterparts in the U.S. His speaking vocabulary is very much larger. And he reads more books on all subjects, including health. You will see many fruit carts in London, many more than in New York City, and you will see the young people in the fish and chips (potatoes) shops, where they eat fish and chips without bread.

If only our medical experts would make nutritional statistical studies the world over and check them with the crime incidence!

Crime Statistics

The crime rate goes up every year. The figures just published show that crime in the U.S. in the first three months of 1966 rose 6 per cent over 1965. That is a large increase in one year, and if the rate of increase keeps up, eventually we will all become criminals. What is the answer? Disregard most of the present methods used to combat crime, for they don't seem to be working. One authority says that to do away with crime we must do away with illiteracy and ignorance, and improve our educational facilities. That person has not read *Up the Down Staircase,* by Bel Kaufman. Education is being kept down by the same factor that is increasing crime.

Public's Lack of Support

New York Times, December 1, 1966:

> Washington, Nov. 30—Police chiefs feel the nation's principal crime problem is not the criminal but the public and its lack of support for the police, a check by the Federal Bureau of Investigation showed today.
>
> The F.B.I. quoted one of the chiefs, Daniel S. C. Liu of Honolulu, as saying:

"The declining respect for the rule of law and authority and the growing number of civil disobedience demonstrations reflect the apathy, indifference and moral regression of our society."

Responses to a poll also blamed lenient courts, increasing urbanization, lack of parental control, baseless charges of police brutality, civil disobedience and criticism of the police rather than of criminals as contributing to the nation's growing crime problem.

They predicted chaos in ten years unless some material changes are forthcoming.

But what is the apathy, indifference and moral regression of our society due to? A lack of physical and mental energy. To understand this, consider the fact that according to the *Midtown Manhattan Study,* (McGraw Hill) the results of a recent survey indicate that only one person in five in midtown Manhattan can be considered essentially well or free of symptoms of mental disturbance. But an emergency has not been declared! We are still in the talk stage. Every day new meetings are called, and new plans suggested which are merely rehashes of old plans. The authorities are floundering!

It Is Later Than You Think!

The U.S. has the highest rate of mental illness of all countries, and the present incidence of this disease is higher than at any time before. This was told to delegates at a White House conference (*N.Y. Times,* September 21, 1963). More than half the beds in all hospitals are devoted to mental cases. In my opinion, this is closely related to all the artificialities which we proudly call civilization. Maybe we had better go back to a savage state and save ourselves from mass insanity!

Crime Rise in L.A.

The following is from the *Los Angeles Times,* (January 8, 1967):

The percentage rise of major crimes has outstripped the population growth rate of Los Angeles ten times over in sixteen years and is increasing alarmingly compared to the police force, Police Chief Thad Brown has reported to the Federal Bureau of Investigation.

Brown's figures showed that during 1966 there were 131,226 major crimes in the city against only 24,796

in 1950—a 429.2 per cent increase during a time in which Los Angeles grew 41 per cent from a population of 1,970,359 to nearly 2.9 million.

The overall crime rate—including minor offenses—per 100,000 population has risen 274.7 per cent since 1950.

The President's Crime Message

The President's crime message to Congress in early February, 1967, advised that there be established in the Department of Justice a director of a new office of law enforcement and criminal justice assistance.

May I humbly suggest that in this new department there be a separate department to be in charge of nutrition as it affects crime. But the head of this division should be a non-prejudiced layman, not too rich a person. The rich have large investments in corporate securities that may be involved in a change-over. It will be a difficult choice—possibly a young career man with a brilliant record.

The president, in his message, said, "I am requesting fifty million dollars in the fiscal year 1968. Our best estimate is that the federal investment (for crime study) in the second year will be approximately three hundred million dollars.

Another Impractical Idea

The *Hartford-Courant*, of October 23, 1966, editorializes about the "Disturbed and Delinquent," describing how the crime rate is increasing and stating that a Senate report just released puts an urgent finger on one of the reasons for this upswing in crime; namely that four and a half million American children are in need of psychiatric treatment right now.

No Comment!

CHAPTER TWENTY-ONE

A Hit Over the Head

IN EARLY SEPTEMBER, 1960, Dr. Karl H. Menges, fifty-two-year-old Professor of Central Asian Languages at Columbia University, was set upon by ten juvenile delinquents on a lighted street near the university in New York and was knocked to the ground by a heavy board. Although bleeding profusely, he arose and put the gang to flight with his cane.

Afterwards at a hospital Dr. Menges said, "I have traveled alone, unarmed, all through the interior of the Caucasus, Turkey, Mongolia, Persia, amid primitive tribes supposed to be hostile to white men. I have also gone among bandits in such places and never been molested. But here in a so-called civilized city, in the evening on a lighted street, near a large university, I am attacked by jungle beasts. I do not think such things should be tolerated."

Dr. Menges, your primitive tribes and bandits do not drink cola drinks, nor do they consume one hundred pounds of white sugar a year as do these juvenile hoodlums, on the average. Your primitive people do not eat ice cream or consume large quantities of pastries, candy, white bread and sodium-nitrite-containing hot dogs. Who *is* to blame for the misdeeds of these young hoodlums? Is it possible that your great university, Columbia, should share some of it? Shouldn't it by this time have investigated the atrocious diet of these teenagers, who practically live in candy stores? Shouldn't it by this time have investigated what such malnutrition does to the blood stream and to the brain which it feeds?

Dr. Menges, you are a professor of Central Asian Languages, therefore you must be intelligent. But why not go beyond your specialty, now that you have had physical contact with the subject of delinquency, and should be more or less interested in it? Why not make a study of the diet of Central Asians and compare it with that of our people. Why not go a bit north, to the top of India where the

Hunzukuts live, and study their character as it is related to their diet?

Why is it, Dr. Menges, that at Columbia's medical school, practically no time is given to medical students on the subject of nutrition? Why is it that we rely wholly on psychiatrists for the handling of the juvenile delinquent problem, when they are like infants with regard to knowledge of nutrition and its effect on the thinking processes? They know nothing about it. Think about these things, Dr. Menges, and you will soon be of the opinion that something must be done about an improvement in the nutrition of these delinquent teenagers. We must not pursue a *laissez faire* system with regard to it. Don't be afraid to tackle the subject. You are better prepared for it than the average doctor, who will have to be hit over the head before he will turn his attention to this subject. You have already been hit.

Another Professor

Another professor, Charles A. Reich, who teaches law at Yale, claims that his late evening walks have been interrupted by the police.

Writing in the *Yale Law Journal* (June, 1966), Professor Reich said:

> My problem is that I like to walk. Most recently, when the officer told me he had the right to stop anyone anyplace anytime—and for no reason—I decided I had better write an article.
>
> If I choose to take an evening walk to see if Andromeda has come up on schedule, I think I am entitled to look . . . without finding myself staring into the blinding beam of a police flashlight.
>
> Very few people know what their rights are under such circumstances. I do not even know how to find out.
>
> The police should not be allowed to stop anyone unless something particular about him, as distinguished from the mass of people, gives cause to believe that he has committed a crime.

Professor Reich is lucky that he was not hit on his head. It is rather strange that this law professor, who is expert on the law, quoting the fourth and fifth amendments against the policeman with the flashlight, is content to stay on the

surface of the law book's page, but does not know beans about what is under the surface.

The professor does not seem to be appreciative of the fact that the policeman was only trying to help him. He does not seem to be aware that conditions are going to get worse. There will come a day when a policeman whose blood sugar happens to be low will hit first, and ask questions afterwards.

There should be courses in nutrition at the Yale law school, and in the police academies.

Crime Methods Ancient

In *Science News* (October, 1966) Patricia McBrown, in a feature article, says, "The time has come to rethink everything about crime and allow new scientific knowledge to pry open the rusty doors of an ancient system."

"Each year in the U.S.," she says, "there are more than six million arrests, a rate that is believed to be considerably below the actual incidence of crime. Better locks and bolts could make crime more difficult, but only deep-rooted changes in the American approach to crime can make it less attractive."

She goes on, "There is reason to believe that many victims—probably a large number of them poor people—never report crime, Mr. Vorenberg said." (He is executive director of the President's Commission on Law Enforcement.) "Add to that the fact that many police agencies 'kill crime,' presumably to maintain a better balance between crime and their ability to solve it, and the real incidence of criminal activity may turn out to be shockingly high."

In connection with the reference to "killing crime," my average reader, I am sure, is completely ignorant about the system of "fixing" in our courts. Many professional, "organized" thieves, who work in mobs recognized by important government elements practice their trade in complete confidence.

If it is their hard luck to get caught, it merely means paying money to someone. And who knows but the chances may be that the people who are the fixers or go-betweens, as well as the people they go to, are low sugar cases.

She goes on, "Science without vision leads to tinkering. The danger is that there will be too much emphasis on 'law enforcement' and too little on 'justice,' too much reliance on technology and too little effort to see deeply

into those basic aspects of American life that promote and perpetuate crime."

Blames Compassion for Crime

The Most Reverend Fulton J. Sheen believes that crime is increasing because of a widespread and false compassion for criminals. Those "who insist on compassion being shown to the junkies, to the dope fiends, the throat slashers, the beatniks, the prostitutes, the homosexuals and the punks, are social slobberers!"

I am not one who favors a compassionate attitude, but I do feel that many criminals are sick and should first be treated for this sickness, before we think of the severity of the punishment and the punishment to fit the crime.

Status of Crime

The Most Reverend Fulton J. Sheen, in his recent statement against clemency of a false kind that is shown criminals, remarked, "There is a robbery in the U.S. every thirty seconds; there is an auto stolen every minute; a rape is committed every three minutes, a murder every hour."

The Bishop declared that the pity shown to criminals is responsible to a large degree for the rising crime rate in the U.S. and the fact that twelve out of every hundred policemen were attacked last year.

As I see it, if the uptrend in crime does not stop, the police will have to go around in threes and fours.

San Francisco Hippies

I am at San Francisco for the winter, and have been watching the strange carryings-on of the beatniks, or the "hippies" as they are called here. It is a sad thing to watch these confused young persons wallowing in a slough of uncertainty, living for the day only, while weakening their bodies with pot (marijuana) and L.S.D.

A few days ago some police agents arrested a storekeeper in a hippie neighborhood. They had bought some pot there and were given green trading stamps.

A few months ago there was a nude display at a hippie outdoor demonstration, but the police adopted a compassionate attitude. There were no arrests.

But yesterday there was a raid in a house in nearby

Inverness, in Marion County, where six hippy girls and thirteen hippy young men were found in the nude. An odor of pot permeated the place.

The raiders, according to the *San Francisco Chronicle* (March 10, 1967), found a typically filthy beatnik pad. It was filthy, dirty. "The kitchen was a mess, the toilet was full and hadn't been working for a week."

They were typical hippies—beards, heavy shocks of hair, sandals, beads and bare feet.

One of the girls complained that an officer had taken away her birth-control pills.

The hippies left a sign—"We've been busted. Play it cool. Love you all."

One of the arrested girls said, "We call this house Kerista House; kerista means love. Don't say how dirty the place is—tell the people about the spirit of the place, how it's a place where people can come and go and how they all love it."

Some of the hippies were sick with the flu and diarrhea.

"All of us have broken away from our families," said a young girl.

Their Diet

Certainly these hippies are malnourished.

The kitchen was a mess. You can imagine what these young people are eating—mostly the quick, "lifting" things, the ice cream cones, soft drinks, chocolate bars, and hot dogs full of high-powered, destructive chemical additives, all the artificial "ready" foods that must be dosed heavily with chemical additives to preserve them from becoming rancid.

But through it all runs their unappeasable craving for sugar. I must tell you about this sugar craving. Many years ago I visited a sugar refinery in Philadelphia, and when I entered the building I was almost choked by the heavily sugar-saturated air going down my throat.

After seeing the factory I was invited to eat at the company cafeteria. At the next table was one of the refinery workers and I watched him put six heaping teaspoons of sugar into his coffee. His whole body and bloodstream was so saturated with sugar that he had to have six teaspoons of it before he could get a sweet taste to his coffee.

Those of us who use a lot of sugar have the same prob-

lem, though to a lesser degree. These hippies who consume a high-sugar diet set up the craving in their blood for more and more sugar. It is the reason why Hitler, the sugar drunkard, craved more and more sugar.

But this one use of sugar is an ideal climate for the causing of a low blood-sugar condition. The blood of the majority of these hippies must be on the very low side.

Give Them Defiance!

You can arrest these hippies all you want, but that won't cure them. For a cure I have an idea, and in this idea I make use of the fact that these young people are in defiance of something. So—channel their defiance in a worthwhile direction. Give them something to fight.

Here is my plan: First let them keep their exaggerated hairdos and let them wear their bizarre clothes, but put both the boys and girls on farms to produce their own food.

Where does the defiance come in? Make use of the controversy going on as between the chemical and organic methods of farming and gardening.

It was I who started this controversy in the U.S. in 1941, when I began publishing *Organic Farming and Gardening.* It was I who introduced Sir Albert Howard's organic ideas into this country. According to Sir Albert, the artificial chemicals were too soluble, and thus forced themselves in over-quantities on the roots of plants, blowing them up in size but reducing their vitamin and mineral content.

He was able to get healthier farm animals and healthier students at a school by feeding them organically grown foods. Since then there has been a long record of experiences in this country and Europe showing the same thing. We have had our own farm in Pennsylvania since 1941, producing our food organically with great benefit to our health.

The terrible thing about using artificial fertilizers is that the soil becomes weaker as it is forced to overproduce, and more chemicals have to be used. Today a frightful amount of these agricultural chemicals are being used on our farms, while the U.S. Department of Agriculture's sole worry is to keep up the earnings of the farmer. Nobody is worrying about the increasing cancer rate, and that of heart disease. Is this partly due to the poor quality of the food forced on us today? Is this one reason why the hippies have become hippie?

The Plan

So, we get the hippies onto farms (the girls as well as the boys) where they are taught in classrooms the nature of the organic-chemical controversy. They are given a training in sufficient horticulture theory to be able to understand what is going on.

They could be told that it is the vested interests in the chemical industry, the artificial fertilizer manufacturers, who control by their grant moneys the researches of the agricultural colleges. They should be taught that these big companies have done nothing to encourage fair farming trials to see which method is better.

The hippie boys and girls should eat up this kind of stuff. It is something worthwhile to fight, a struggle against the big chemical dragons who have been weakening the bodies of our youth by not giving them good healthy fuel with which to stoke them!

These youngsters will conduct tests, growing crops side by side, the chemical versus the organic, and feed mice to see which group is not only more healthful, but which group is less warlike.

Slowly they can be shown the dangers of too much sugar and starchy food in their diet. Slowly the diet on the farms will evolve into the perfect high-protein diet. You can't take all sugar away abruptly. It must be done gradually.

Don't forget that people all over our land, including the criminals, are not only eating a wrong diet, but what they do eat is a weak excuse for food, very low in vitamins and minerals, and other elements in food which cannot be detected by the present type of technological equipment. Is it any wonder that the Manhattan study has shown that four out of five persons have mental problems.

This experiment I suggest could start with a small group, and it must be highly publicized.

Alcoholism and Sugar

Many of the hippies are alcohol imbibers, but there are several researches which incriminate sugar as creating a desire for drink. One of these was done by Drs. Roger J. Williams and Mary Kay Roach of the University of Texas.

Their experiment tied in with the brain's inability to burn a form of sugar called glucose. Their work seems to explain why candy and sugary soft drinks are often of aid

to drunkards in coming out of a drinking spree. The extra sugar thus obtained compensates for the brain's inability to handle sugar.

The theory is somewhat similar in action to that of a diabetic who suddenly feels a dizzy spell coming on. Some of them carry some chocolate which they quickly eat and the spell passes on. But if the diabetic ate chocolate as a regular thing it might kill him. In this case, as in the case of the drunkard, the candy is used merely as a medicine.

According to this new theory, in the case of the drunkard, consuming sugar regularly would create the desire to drink.

The Foundations

In a previous chapter I mentioned a grant by the Ford Foundation to study crime. There are hundreds of other nonprofit foundations that could start experimental projects on different phases of the subject.

Recently Samuel Lemberg, New York realtor and trustee of Brandeis University, gave it one million dollars for the establishment of a new center for the study of violence in America. The university has a campaign on to collect forty-six million dollars by the end of 1968. It already has ten million dollars of it.

According to the Boston Globe (November 20, 1966), "The new center will eventually cover the entire field of violent behavior. Its first research project will be the mounting frequency of racial conflicts around the nation."

It would seem to me that a study by this new Lemberg Center should be made of "Does Sugar Make Criminals?" In other words, is a low blood sugar condition the basis for violent behavior?

There is a lot of money in the treasury of many foundations looking for laudable projects in which to "invest." I trust that many of them will read this book and take some action. It is later than you think. There is more crime than shows on the surface. Let us act before it is too late!

CHAPTER TWENTY-TWO

NOW YOU MIGHT SAY, O.K. we won't use sugar, but we'll sweeten our foods with the various no-cal sugar substitutes on the market. But I will advise you against it, for it might be like jumping from the frying pan into the fire.

I will quote from a section of our *Health Finder,* p. 696.

> Saccharin is a product of coal tar, in the manufacture of which sulfuric acid and other chemicals are used.... It is related to salicylic acid (used in aspirin) and phenol (carbolic acid), both of which are also coal tar products. As long ago as the 1890's a commission of the Health Association in France decreed that, since saccharin is harmful to the organism, import and manufacturing of it was to be forbidden. In 1919 the sale and manufacture of saccharin were regulated in Russia. In Germany saccharin was allowed only as an apothecary's item by 1898. Its use in the manufacture of all kinds of foods and drinks was forbidden. Saccharin was put under a similar ban in Spain, Portugal and Hungary.
>
> In the *British Medical Journal* (October 9, 1915) H. C. Ross, M.D., of the Lister Institute, tells us that "recent research at the McFadden Laboratories at the Lister Institute has shown that saccharin is a powerful auxetic (which excites cell reproduction), like several other constituents and derivatives of coal tar; and there is now strong evidence that it is these auxetics in tar and pitch that give rise to the predisposition to the cancer known as pitch and sweep's cancer."

Effect of Saccharin on Peas

We discovered several experiments revealing the deadly effect of saccharin on plants and one-celled animals. E. Verschaffelt, M.D., writing in the Dutch Medical Journal *Pharmaceutisch Weekblad* (Vol. LIX, 1915), describes an experiment in which he soaked dry peas in four different solutions: plain water, salt, sugar and saccharin. Two days later 94 per cent of the peas treated with water had

sprouted; 87 per cent of the peas treated with sugar had sprouted; 44 per cent of those soaked in salt water germinated; and none of the peas soaked in saccharin solution sprouted. Using a saccharin solution only half as strong as the salt solution, Dr. Verschaffelt once again found that the salt-treated peas germinated twice as fast as those soaked in saccharin. His conclusions are that saccharin is a protoplasmic poison. That is, regardless of how long the process may take, saccharin eventually poisons protoplasm, which is nothing more or less than the substance of which plants and animals are made.

Effect of Saccharin on One-Celled Animals

Dr. W. A. Uglow, M.D., tested saccharin on one-celled animals and his experiments are reported in the German medical magazine *Archiv fur Hygiene* (Vol. XCII, 1924). Testing saccharin solutions and phenol (carbolic acid) solutions of varying strength, Dr. Uglow found that saccharin is twelve times as deadly to bacteria as carbolic acid, which is another coal tar derivative and a deadly poison. In a further test he found that a solution of one part saccharin to five hundred parts of distilled water almost corresponds in its toxicity to a .05 solution of sulfuric acid —another violent poison.

In a solution of one part of saccharin to four hundred parts of water Dr. Uglow placed some cyclops quadricornis (a microscopic one-celled animal). They died within forty minutes. In a solution of one to eight hundred parts of water, they died within an hour, and so on until he found that it took a solution of one part of saccharin to eight thousand parts of water just twenty-four hours to kill all the cyclops. Incidentally one part of saccharin to ten thousand parts of water is approximately the solution we get when we slip a saccharin tablet into a cup of tea or coffee.

Experiment with Rats

Valentine and Weber, in the *Journal of Comparative Physiological Psychology* (1965. pp 443-6), described an experiment in which rats receiving a subcutaneous injection of insulin which was lethal to 50 per cent of untreated rats were permitted to drink solutions of saccharin, glucose and water.

Significantly more rats of the saccharin group succumbed than did those given water. Rats given glucose were protected.

"It may be an error," says the article, "to assume that saccharin is physiologically inert."

It is a well-recognized medical fact that prolonged use of saccharin can damage the liver.

I cannot understand doctors who prescribe saccharin when they could tell their patients to put a dab of honey in a cup of coffee.

Doctors Ask Investigation of Artificial Sweeteners (Rodale Health Bulletin, *September 12, 1964*)

Artificial sweeteners, widely used in the new low-calorie soft drinks, desserts and syrups, have been accepted without any real assurance that they are safe, a prominent group of doctors reported this week. Representing the *Medical Letter*, a nonprofit publication which comments on the safety and effectiveness of drugs, the doctors called on the Food and Drug Administration and the National Research Council to investigate the safety of saccharin and cyclamate.

In light of the wide and indiscriminate use of these sweeteners, a reappraisal of the toxicology of artificial sweeteners, in sick as well as healthy persons and in pregnancy and (mothers' milk) is in order," the physicians' group said. Questions were also raised in the report about the effectiveness of artificial sweeteners in weight reduction. Attention was called to a study published in the *Journal of the American Dietetic Association* which found no significant weight loss by users of artificial sweeteners.

Originally intended for special dietary purposes, as in the treatment of diabetic patients, the chemical sweeteners are being bought in ever-increasing quantities by healthy consumers. Best indication of the popularity of the sweeteners is the recent trend toward low-calorie soft drinks. Nearly 100 million cases of these drinks were sold in 1963, doubling 1962's figure. Expectations are that sales will double this year. The Economic Research Service of the U.S. Department of Agriculture stated in 1963 that "as consumers become accustomed to the characteristics of soft drinks manufactured with non-caloric sweeteners, more of them may come to prefer such products, particularly when sold as highly advertised brands, and may resist attempts by manufacturers to return to products sweetened only by sugar."

Side-Effects from Diet Candy

Ohio physician Gordon M. Todd reported in a recent issue of *The New England Journal of Medicine* that dietary candy can produce abdominal distention, gas and diarrhea. He reported a case of a diabetic who developed those symptoms because of the sorbitol in sugarless candy. Previous literature indicated that only children were susceptible to the diuretic effects of sorbitol in unsweetened candy. The fact that such symptoms can also occur in adults "should be more widely publicized," he said.

Artificial Sweeteners Troublesome to Children

The following is from *Rodale's Health Bulletin* (October 8, 1966):

A report of a medical problem resulting from use of chemical sugar substitutes was published this week in *The New England Journal of Medicine.* A pediatrician from the Yale University School of Medicine said that ten children with diarrhea following ingestion of sugarless candies have been seen at the Yale-New Haven Hospital during the last fifteen months. The patients were between twenty and thirty-six months of age, and their troubles resulted from eating a full package of dietetic mints, containing 9.3 grams of sorbitol, reported Dr. Joyce D. Gryboski.

A patient of particular interest to Dr. Gryboski was a twenty-four-month-old boy who had been given a full package of dietetic candy by his dentist. After eating the whole package, the child had an "explosive, watery-orange stool," followed by ten more loose bowel movements. By the next morning he had recovered. Studies at the Yale-New Haven Hospital confirmed that small children of three years of age or less would suffer similar effects from eating a whole package of sugarless candy.

The laxative effect of artificial sweeteners has long been known, but apparently adults don't consume enough sugar substitutes to cause a serious problem. Dr. Gryboski pointed out that the adult threshold for laxative effect has been established at 20 to 30 grams of sorbitol syrup, which would be equivalent to two to three packages of candy. Diet soft drinks and other artificially sweetened foods contribute to the body's load of such products, however, and the Food and

Drug Adminstration has indicated that it is observing increased use of artificial sweeteners with interest.

Saccharin in Czechoslovakia

Two articles were written by Imrich Molec, M.D., Health Commissioner of Myjave in Czechoslovakia and printed in *Bratislavski Lekarske Listy,* May, 1938. These two articles are concerned with a health study of the mountain folk of a county in Czechoslovakia. These poor families used saccharin almost exclusively in place of sugar, because it was cheaper. When saccharin is given in large quantities and regularly, says Dr. Molec, it would appear that it has a very definite effect on the growing organism. The growing boys in this locality from the ages of ten to fourteen suffered from goiter. All of them used saccharin as their only sweetening agent. When the saccharin was discontinued and a nutritious diet was given to the children, the goiter symptoms decreased.

The case of one family is of special interest. There were three children. One child had taken saccharin only part of the time and sometimes had sugar instead. His goiter was quite small and decreased greatly when he was given a good diet. The other children, who had used saccharin exclusively, showed larger goiters which did not respond to treatment by good diet. Because of these observations, Dr. Molec then tested rabbits with saccharin injections and, sure enough, he found that the rabbits who were given saccharin developed unhealthy enlarged thyroid glands while the control rabbits did not.

Diarrhea from Artificial Sweeteners

An interesting indication of the possible dangers of artificial sweeteners came in the form of a letter to *Consumer Reports:*

> Because of an unquenchable thirst which nursing mothers have, and not wishing to become obese, I was consuming about two quarts of low-calorie soda a day. My daughter, then under two months, had terrible diarrhea. On the advice of my pediatrician, I was eliminating one food after another from my own diet to discover the cause. Then I read your article (on synthetic sweeteners) and immediately switched to water. She was better within two days.

New Report Questions Safety of Artificial Sweeteners

From *Rodale's Health Bulletin,* September 25, 1965:

Certain artificial sweeteners widely used in the new low-calorie soft drinks, desserts and syrups may not deserve the clean bill of health given them recently by the U.S. Food and Drug Administration. Several weeks ago the Canadian Food and Drug Directorate was handed a top secret report on the effects of sodium and calcium cyclamate on rats. Prepared by the Wisconsin Alumni Research Foundation and soon to be published in a leading scientific journal, the report contains "disturbing" information, according to one government researcher. As a result, the Food and Drug Directorate has appointed a special team of scientists to probe the possible harmful effects of synthetic sweeteners. "We have done work on the cyclamates before in a limited way, but with this information we thought we should do some more work now," another federal researcher pointed out. "If they are found to be a problem, we are prepared to make any changes according to whatever is required," he added.

Although the Wisconsin report has not been released to the public, information given to the federal scientists shows that the cyclamates have harmful effects on rats. The chemicals stunted the animals' growth, resulted in the death of litters and affected their ability to conceive. The dosages and over what period the side effects turned up have not been released as yet. Dr. Ross Chapman, head of the Food and Drug Directorate, said his department's studies will be similar to the Wisconsin tests.

Artificial Sweeteners Studied

The following is from *Science News* (February 11, 1967):

Artificial sweeteners have been cited as a possible cause of birth defects and fetal deaths. The Food and Drug Administration is investigating effects of cyclamates, an ingredient of most such sweeteners; it plans no immediate action because evidence is scant.

Large doses of artificial sweeteners, equivalent to about one hundred teaspoons of sugar a day, have been known to have a laxative effect on humans, but consumption of such quantity is unlikely. Spokesmen for the National Institutes of Health report no known

relationship between artificial sweeteners and birth defects among either normal or diabetic women.

The FDA investigation was started as a result of isolated data linking cyclamates and birth defects, the most recent being a study by Dr. Ryoka Tanaka of the Japanese Public Health Service. He found that about half of the unborn fetuses of mice died when the mothers were given large doses of sweeteners between the fourth and seventh days of pregnancy.

The Case of Dr. Boros

Dr. Boros is a specialist in gastro-neurology. He has done investigative work, written about sixty scientific papers, and served many years on the faculty of New York University's Medical School.

Here is what is said about him, in an article in *Fact* magazine (November-December, 1966):

"In 1965 Dr. Boros wrote a letter to the *Journal of the American Medical Association* describing his clinical observations of cyclamate sweeteners. The letter, published in the November issue, goes into details that appear to be unquestionable because Dr. Boros himself was the unfortunate guinea pig.

Dr. Boros began by noting that his personal history reflected a happy absence of medical problems except for the usual afflictions in infancy and early childhood. He went on to say that his body had tolerated various chemicals such as tetracyline, erythromycin, demethylchlortetracycline, salicylates, and antihistamines.

The doctor had a weight problem. From time to time he had used small daily doses of thyroid extract as an adjuvant to weight reduction. In 1964 he decided to cut down his calorie intake by substituting cyclamate sweeteners for sugar. He began by using recommended daily amounts in the course of eating his meals. Then he noticed body changes. "A bad taste in my mouth characterized my waking hours. An unquestionable and pronounced diuretic effect (increasing flow of urine) was present shortly after intake." He also began to suffer occasional dizziness, a mean itch, and patches of rash.

Dr. Boros eliminated the sugar substitute and a few days later the discomfort and other symptoms vanished. After a period of abstinence, he began to use cyclamate again, but only half the recommended amount. Again,

the diuresis was obvious and a milder rash returned, along with the itch. However, Dr. Boros continued using cyclamate in the hope that in time desensitization might be accomplished. Dr. Boros, like most doctors, believes calories count when properly supervised, and hoped to benefit from the cyclamate.

After four weeks of reduced use of the sweetener, he was annoyed by a fluttering within one ear that lasted some twenty to thirty seconds and recurred after three to five minutes. An otologist examined his ear and found the canal was free and the drum negative. Dr. Boros reasoned that his ear had been affected by the sweetener and discontinued use of the cyclamate. At the end of five days, the ear no longer bothered him, and over a longer period of time the itch and rashes completely disappeared.

Dr. Boros concluded in his letter to the *J.A.M.A.*, "Cause and effect have been clearly established in the use of calcium saccharine and calcium cyclamate when ingested by me."

In conversation Dr. Boros told me, "I have had hundreds of patients since then, and I mean hundreds, who have all kinds of fantastic things happen to them —from enormous rashing that baffles skin specialists to wooziness and ringing in the ear. I've told them to eliminate low-calorie drinks and artificial sweeteners and they have cured themselves."

Artificial Sweeteners and Low Blood Sugar

In *Science News Letter* (April 29, 1961) Dr. Albert A. Branca, of the University of Delaware, calls our attention to another fault to be found with sugarless sweeteners. They do strange things to your blood-sugar level. When one is accustomed to a sweet taste upon eating sugar, the sweet taste alone is enough to set in motion the bodily machinery that ordinarily operates when sugar is eaten. Insulin is released in the body; more glucose is used; glycogen is conserved. The result is a lowering of blood sugar. This also occurs when something sweet—even though it be something other than sugar—is eaten. Dr. Branca reported that thirteen out of fourteen normal students observed in a test had lowered blood sugar after drinking a solution of sugarless sweeteners.

If we had to choose between refined white sugar and an artificial sweetener, we would have to choose the refined

sugar as being less harmful to the body. That is not to say that refined white sugar is healthful. Far from it. The only healthful sweet is that which occurs naturally in fruits and vegetables. The sugar that makes peas and corn, apples and peaches, sweet, that is the only sugar one should eat if health is one's aim.

CHAPTER TWENTY-THREE

Medical Proofs

IN MY FILES I have stacks of clippings from medical journals, proving that the consumption of white sugar can lead to many disease conditions.

Dental Cavities

The dental profession has learned that the elimination of artificial sugar from the diet will bring dental cavities to practically zero.

Multiple Sclerosis

Dr. H. J. Roberts, Palm Beach Institute for Medical Research, West Palm Beach, Florida, writing in *The Lancet* (October 1, 1966), regarding multiple sclerosis:

> It is my belief that these neurological consequences of D.H. are initiated and perpetuated by both excessive sugar ingestion and contemporary eating habits in those populations having a high incidence of multiple sclerosis.

Tongue Ulcers

Dr. Donald Shriber, in *Modern Nutrition* (October, 1958):

> A twenty-two-month-old child was brought to my office for the treatment of large ulcers, similar in appearance to the common canker sore, and appearing on both sides of the tongue, on both cheeks and on the tonsilar region. They varied in size from the diameter of a pencil to one the size of a quarter. He was feverish and underweight. The mother felt that he was too thin so she had been feeding the child ice

cream, candy, cookies, pie, cake, pastries, in fact everything which she thought would put weight on him. Incidentally, it did not increase his weight. By now you must have guessed what I did. You are right. Owing to the emergency of the case, medication was used in support of the diet and a very dramatic result was obtained. The ulcers disappeared in one week's time, although they had resisted other types of medication for two months prior. I believe that the removal of sugar from his diet aided tremendously in his recovery.

Periodontitis, Headaches, Sinusitis, and Constipation

Another case by Dr. Shriber, in the same article:

A fifty-year-old woman came to my office having a well-advanced case of periodontitis. There was considerable bone loss around the teeth, which was very uncomfortable. My first interview revealed that about three years previously x-rays had been made of the teeth. By comparing them with the present ones, it was seen that there was considerable bone loss in that period of time. She complained of frequent, severe headaches in the back of her head; chronic sinusitis which had been diagnosed by an ear, nose and throat specialist; she had to get up two or three times a night to urinate; chronic constipation for years was another complaint; her craving for sweets was insatiable; she ate from a pound to two pounds of candy a week; upon awakening in the morning she felt utterly exhausted and this feeling continued throughout the day which necessitated frequent naps; she complained of mental depression and menopausal distress with its attendant hot flashes.

Let us examine what a sugar-and-white-flour-free diet had accomplished for her, by the time she returned two weeks later. Her teeth according to her statement felt tighter (examination supported this statement) and were free from pain brought about by sudden changes of temperature in food. She had only one slight headache; the sinus condition was not as annoying (post-nasal drip); she could sleep through the night without having to get up; her exhausted feeling had disappeared, and her husband told me that she was much more cheerful; the hot flashes had nearly abated; but her craving for sweets had not decreased.

There was such a marked improvement in the biochemical index that no further treatment seemed necessary.

High Blood Pressure

Dr. Shriber gives another case:

When sugar was eliminated from the diet of a patient whom I saw at the County Hospital, the results were quite dramatic. She had a painful pyorrhoetic condition and a blood pressure of 260/150. She was asked to stop taking Serpasil (the alkaloid salt of Rauwolfia, that famous root known for its tranquilizing properties), for two weeks. She had been taking this drug for a period of two months without any apparent relief from her high blood pressure. A sugar-free diet was prescribed; and when she returned two weeks later, a drop of 110 points occurred in her blood pressure, making it 150/100. Also there was quite a dramatic reduction in the blood cholesterol, from 360 milligrams per 100 cubic centimeters of blood to 190 milligrams, which is within normal limits. Needless to say she left granulated sugar completely out of her diet and discontinued taking the tranquilizer. Her blood pressure continued to improve with slight fluctuations around the 130 mark over the diastolic range of from 80 to 85.

Polio

In Chapter Five, we gave a few brief notes about Dr. Sandler's sugar-polio theory. I would like to add a few more here:

Benjamin P. Sandler, M.D. of the Oteen Veteran's Hospital, near Asheville, North Carolina, in 1948 stopped a disastrous polio epidemic with his diet which was broadcast over the radio and published in the newspapers in North Carolina.

He stated without reserve that he could establish total immunity against the disease within a twenty-four-hour period, if a person would give up soft drinks, preserved fruits, ice cream, candy, cakes, white or corn bread, and other refined carbohydrates.

He gives as his reason the fact that consumption of these sugary products, in vulnerable people, produces a state of low blood sugar which furnishes a good climate for the

polio virus to become active. Polio came in epidemic form in the summer when people were consuming a great deal of ice cream and soda pop, and then swimming until a state of fatigue set in, or permitting some other factor to operate to bring on the attack.

At the time Dr. Sandler released his statement, 1,172 persons had fallen prey to polio in North Carolina. By October 30th the number had spiraled to 2,402 cases. Suddenly the tide was checked. In 1949 there were only 214 polio cases in North Carolina.

Dr. Sandler had done his original research with rabbits (who were considered polio-proof). This work was done at the Willard Parker Hospital in New York during the city's record polio outbreak of 1931 and confirmed his theory.

The *New York Times* and a few other papers carried the North Carolina story, but the idea did not spread. It did not even continue in North Carolina. In a year or two the people went back to their ice creams and sodas. Nor did the Polio Foundation do anything about it.

Note: Machinery in the manufacture of sugar was introduced around 1840, which gave the use of sugar a great impetus. The first known cases of polio were recorded about 1840.

Headaches, Exhaustion

Early in April, 1965, a thirty-nine-year-old Cincinnati housewife went to the office of Dr. Harry M. Salzer. She appeared neurotic, and complained of headache, a constant buzzing in her ears and constant exhaustion.

She told the doctor that she was always irritable. She had dizzy spells, and woke up often during the night in a cold sweat. Unfounded fear sometimes overwhelmed her.

Dr. Salzer immediately gave the woman a glucose-tolerance test to determine the amount of sugar in her blood. He was not surprised to find that the woman was suffering from hypoglycemia—low blood sugar.

He had worked with hundreds of patients like her, many of them suffering so severely that they had been hospitalized in mental institutions because the ailment had been misdiagnosed as insanity. New York physician John W. Tintera has estimated that 80 per cent of those in mental hospitals in this country are victims of hypoglycemia.

Salzer's therapy was simple. He prescribed a diet. Within two weeks the woman's headache had vanished along with all other symptoms. After seven weeks she said, "My disposition has improved a lot; they can't get over it. I laugh about so many more things!"

Dr. Salzer comments, "If the human animal will follow a diet that resembles that of primitive man, who ate the meat of small animals, fish, and fowl, who robbed nests of eggs, ate root and leaf vegetables, nuts, fruits, and berries, the body will function at maximum physiologic efficiency."

Boils

A study was published in the *Journal of the Medical Association of the State of Alabama* in December, 1964, written by the brilliant, pioneering investigators of the University of Alabama Medical Center, Doctors E. Cheraskin and W. M. Ringsdorf, Jr.

Titled "Furunculosis and Carbohydrate Metabolism," the Cheraskin-Ringsdorf study has carried "what everybody knows" a step further and for the first time has produced evidence that chronic boils are related not only to an excess of sugar in the blood but also to its reverse, an insufficiency of blood sugar. In other words, boils are related to any chronic abnormality of the blood sugar level, and not only to an excess of sugar.

The method by which Doctors Cheraskin and Ringsdorf determined this depends completely on mathematical statistical analysis that it would be impossible to reproduce here. It involved examination of two hundred ninety patients in a complicated pairing arrangement that used such elements as age, sex, positive or negative findings of furunculosis and tests of the blood-sugar level. The mathematical techniques made it possible to obtain from the two hundred ninety cases results that otherwise might have required thousands. And though it could hardly be described to non-mathematicians, the mathematical technique seems impeccable to us and the conclusion completely persuasive.

In our own understanding of this conclusion, what it comes down to is that for a normal skin able to successfully resist staph infections, we require a blood sugar level that is completely normal.

Tonsilitis

J.W.S. Lindahl, M. Chir. F.R.C.S., writing in the December, 1951, issue of the *Practitioner,* says, "It has been suggested that one predisposing factor (in tonsilitis) is an unbalanced diet with too much sugar and starch in relation to protein and green vegetables, and I believe there is much to be said for this theory."

I can testify that about forty years ago I had to have my tonsils out, and at the time I was a sugar drunkard.

Ulcers

Sugar not only is a factor in the way the mind acts but it can affect the body physically in many ways. One way is to cause ulcers. The New York Peptic Ulcer Research Trust of England, led by Dr. Charles Pulverstaft, radiologist to New York City hospitals, made a survey of over 2,600 persons with ulcers. They found that careless eating habits or taking too much sugar are usually the cause of ulcers rather than strain, stress, or excessive responsibility. In the *New York Times* of Feb. 6, 1960, Dr. Pulverstaft, said, "The idea of the 'executive ulcer' as the exclusive property of the big businessman keeping his nose too hard to the grindstone is out." He says that ulcers are "not uncommon among children." Naturally this is to be expected with all the ice cream, candies, soda pop and such sugar products that they consume.

Peptic ulcers are not caused by the tensions of our modern life. If this were so then why is it that, according to the statistics of the U.S. Department of Agriculture, about 60 percent of pigs have ulcers? Perhaps if they didn't eat so much dirty slop, they wouldn't have them. It has a great deal to do with the diet.

T. Quigley, M.D., discovered the same thing in his practice. He wrote about it in *The Nebraska State Medical Journal* of April, 1945. He said, "Sugar furnishes calories without vitamins or minerals. It is slow poison for the ulcer patient. . . . All foods containing sugar or white flour are permanently forbidden." He cured thirteen ulcer cases by getting his patients to adopt healthy diets with the elimination of all artificial sugar. Some of his cases had had ulcers for twenty years.

Dr. Quigley said, "Peptic ulcer is never caused by nervousness. It is associated with it. These persons are irritable

and unstable. . . . the nerve disease and the ulcer go back to a common cause: an overconsumption of refined carbohydrates (sugar) which causes a dangerous reduction of the vitamin and mineral concentration in the blood stream."

It is the same thing that is at the bottom of human delinquency.

Cancer

Here is part of a letter I received recently from Dr. H. R. Lotz of Bristol, Connecticut:

> This I have known for twenty years: that positive cancer sufferers in the final stages, and right up to the point of death, can live free of pain if they will live entirely on natural food and completely eliminate all sugar, which means just the *artificial sugar* and the complete abstinence of all products in which sugar enters, such as bread, cake, etc.
>
> But I do not think this is because of any harmful ingredient in the sweet but rather that the excessive use causes a complete imbalance in tissue cells. This is exactly similar to what happens when an excess of nitrogen and lack of other nutrients are incorporated in a piece of garden.

In a book called *Truth about Sugar*, by H. V. Knaggs (1913), the author says:

> Brandt, an eminent German chemist, has shown that a six to ten per cent solution of cane sugar causes irritation, with the redness of the mucous lining of a dog's stomach.

More on Sugar and Cancer

Frederich H. Hoffman, of the Prudential Life Insurance Company, in his 767-page book, *Cancer and Diet* (Williams & Wilkins, 1937) has the following to say:

> J. Ellis Barker, a layman, in 1924 published a substantial volume on *Cancer, How it is Caused; How it can be Prevented*, with an introduction by Sir W. Arbuthnot Lane, which attracted world-wide attention and is often quoted. The book is largely concerned with the dietary aspects of cancer which cannot be abbreviated to advantage. He emphasizes the importance of vitamins and concludes in part:

"Modern civilized feeding has two great characteristics. Civilized nations are being starved of vitamins in the form of green vegetables and especially of uncooked vegetables, such as salads. They are starved of vitamins in the form of the outer skin of every kind. They are starved of the vitamins contained in uncooked milk and in fresh meat. While civilized men and women are being starved of all these essentials, they are being supplied with a super-abundance of sugar. The increase in the consumption of sugar has been as extraordinarily great and as rapid as has been the diminution in the consumption of vitamins."

He calls attention to the enormous increase in the per capita consumption of sugar, quoting Hutchinson to the effect that in strong solution sugar is an irritant to the tissues. In contact with the skin, it is apt to set up superficial inflammation. Furthermore he observes:

"The instinctive feeling of hale, old people and of the most experienced old practitioners that immoderate consumption of sugar is very harmful is borne out of observation and by the latest discoveries of science. Everybody knows extravagant sugar-eaters. They are usually chronic dyspeptics. Very bad odors emanate from them, and they have a wretched complexion. As a rule, they are very constipated and are bad-tempered. Over-fondness of sweets almost invariably goes together with a dislike of vegetables and of fresh fruit and of fresh meat. Thus over-indulgence in sweets seems somehow or other to lead to vitamin starvation with all its very serious consequences."

Hoffman mentions Dr. Bernhard Fischer-Wasels, Director of the Pathological Institute of the University of Frankfort, who in a monograph on *Methods of Preventing Cancerous Diseases* was emphatic in pointing out the danger and harmfulness of an excessive carbohydrate nutrition, and the danger and harmfulness of excessive sugar intake.

Sugar Levels in Cancer

Dr. Melvin Page in his previously mentioned book *Degeneration-Regeneration*, said:

"We believe that the sugar level of the blood is even more important than Dr. Meyerhof states. We do not remember seeing a single cancer case who had a correct sugar level, yet in most non-cancer cases this is easily ob-

tained by means of a sugar-free diet alone." Dr. Page then describes a case of skin cancer of the face which cleared up entirely within a few months when the patient gave up drinking daily twelve bottles of a widely distributed soft drink.

Coloring Matter in Sugar Products

We must not overlook the cancer-causing coloring matter used in candies and pastries. When one eliminates these foods from the diet because of their sugar content, one is also removing the irritating colors which they contain. The government lists certain colors as definite cancer causers, but certifies a group of others which it considers safe. Yet every few years it discovers that some of the certified colors can produce cancer and then bans them. But note this statement in the August 2, 1954, issue of *Chemical and Engineering News*:

"Dyes *known to cause cancer in animals* were okayed by FDA (Food and Drug Administration) for use in foods to the tune of 100,000 pounds last year."

Also—a recent announcement from a U.S. health organization states that there was terrible confusion in regard to the attitude towards coloring matter in foods by various governments—that all but one of the eighty colors used were banned by some of the governments but not by all, which means that some think certain colors are cancer-causers while others do not.

Sugar, the Indirect Cause of Cancer?

It is not maintained that the eating of sugar is a direct cause of cancer, but the evidence strongly indicates that it could be a contributing cause of it. There is no one cause of cancer, for there are too many factors involved. For example, not everyone who smokes cigarettes gets cancer of the lungs, but if a person takes excssive amounts of sugar and smokes excessively, he is probably more liable to get it than one who smokes but shuns sugar. If one eats sugar, if he ingests cancer-causing coloring matter from candies, if he works in a factory where he is exposed to certain chemical fumes, if he is a heavy cigarette smoker, and if he doesn't get cancer, he is a fortunate one indeed. Who knows? There may be weakened or susceptible individuals who might get cancer from consuming large amounts of sugar because of the generally devitalized nature of the rest of the diet.

Sugar-Cholesterol Controversy

Dr. John Yudkin of Queen Elizabeth College, London, England, recently set off a bombshell in the medical world when he announced the results of researches which incriminated sugar as the cause of heart attacks rather than fats or cholesterol. As a result he has many letters from doctors in the columns of the *Lancet* where his original article appeared.

From one of them (August 29, 1964) I will quote the following:

> In a recent paper Dr. Margaret Ohlson and her colleagues examined the average American diet over the past seventy years. They found that fat consumption has increased by only 12 per cent, most of the increase being of polyunsaturated fats. On the widely held hypothesis that ischaemic heart disease is caused by a low ratio of polyunsaturated fat to saturated fat, one would have expected a fall in the prevalence of ischaemic heart disease. In fact, there has been a considerable rise; and the major dietary changes during the same period were a decrease in the consumption of starchy foods, and an increase of as much as 120 per cent in the consumption of sugar.

More Investigators on Sugar-Heart Theory

Since Dr. Yudkin began to write about sugar and heart disease several other medical investigators have added other experimental work to buttress this theory.

But in the December, 1959, issue of *Prevention* we had a four-page article which proved that sugar is a prominent cause leading to heart failure.

The article cited experiments by Dr. Callie Mae Coons and Dr. Madelyn Womack of the Dept. of Agriculture Research Center in Beltsville, Maryland. Two hundred seventy laboratory rats were fed varying amounts of protein and various types of fats and carbohydrates. It was found that the type of carbohydrate is highly significant in terms of the cholesterol count.

Rats eating sugar as 50 per cent of their diet had twice as much serum cholesterol as those eating cornstarch in the same proportion. This was regardless of whether the carbohydrate was eaten in conjuction with saturated or unsaturated fats.

We went on to show that refined sugar—white table

sugar—depletes the body of its store of thiamin (vitamin B_1), unlike the more natural carbohydrates such as potatoes, beans and fruits, which carry their own supply of thiamin, required to properly metabolize carbohydrates. By using thiamin it does not replace, consumption of table sugar can easily create a deficiency in this vitamin.

And then we went on to quote the prominent nutritionists Walter H. Eddy, Ph.D., and Gilbert Dalldorf, M.D., who said: "Thiamin deficiency impairs the function of the heart, increases the tendency to extravascular fluid collections and results in terminal cardiac standstill."

Coffee, Sugar and Heart Disease

In the April 23, 1966, issue of the *Lancet,* there is a letter from Dr. Yudkin in which the question of coffee and heart disease is involved. In it he says that the strongest evidence that sugar is a cause of myocardial infarction, a common type of heart attack, is his joint finding that "patients who had recently had an infarct (heart attack) had been consuming twice as much sugar as control subjects."

Then he draws attention to a study by a Dr. O. Paul and others of coffee drinking as a cause of heart trouble. But Yudkin answers that the higher coffee consumption in the heart cases could be due to a higher sugar consumption. People on the average put sugar in their coffee. In fact, he says he found that his heart patients put more sugar in each cup of tea than the average person.

In the same letter, Dr. Yudkin says, ". . . the Swedes use 50 per cent more coffee than the Americans but have 30 per cent lower mortality from myocardial infarction."

Backing for Sugar Theory

Three doctors from Czechoslovakia have written to the English journal *The Lancet* saying that their observations back up the theory of Professor John Yudkin that excess consumption of sugar, not fat, is associated with increasing heart disease. Using food consumption data from the ten regions of Czechoslovakia they found that people in the districts with highest sugar use had the most heart disease. Fat consumption was not as closely related to mortality from cardiovascular disease. Although they recommend "cutting down the high consumption of sugar so usual in

industrial countries," they caution against drawing definite conclusions from the data now available.

Conclusion

From the foregoing we can see that in addition to producing low blood sugar, with all its pathological effects on the human body, the consumption of sugar causes a host of other disease conditions which help to fill doctors' offices and take up valuable hospital beds.

Also think of the money costs involved! The government is building more and more hospitals, but the people are taxed to pay for them.

What a boon it would be, in so many ways, if artificial sugar was not considered a safe food, if there was so little demand for it that the sugar refineries could not pay dividends.

Medical men, arise, and teach the people what sugar is doing to them. Let us publicize the truth on a wide scale.

CHAPTER TWENTY-FOUR

Autobiography of a Low Blood-Sugar Victim
(From Prevention Magazine, May, 1966)

OVER A YEAR AGO I was taken to the state hospital more dead than alive, after three solid months of twenty-four-hour-a-day boozing, the last four weeks in a constant state of hallucinations and DT's. I had several seizures during this time. My mind was almost a blank. I could barely walk; my ankles draped over the sides of my shoes. All of this alcoholic bout was accompanied by a skull-crushing headache, pains that no amount of alcohol stopped.

After two months in the mental hospital my entire problem was diagnosed as "not blowing my top" enough.

I left the hospital in worse shape than when I came. I was broke, twice married, twice divorced, had jumped so many jobs no one would hire me in sale or promotions or even as a bill collector. Forty-seven years old and so weak physically even light physical labor was accompanied by excruciating pain and black depression. To knock the "top" off the pain I was taking as many as 250 aspirins a week with no relief.

I found part-time work in a skid row "greasy spoon" and lived in a skid row hotel. A day's work sometimes incapacitated me for several days. Not once was my mind off suicide.

Looking back, the worse this condition became the more sweet stuff I ate until almost my entire diet was sugar and starch. I stayed away from the liquor. But my decisions and behavior were often as bizarre as if I had been drunk. A major portion of the time I was frantic; something as complicated as setting the alarm on my clock threw me. I had to admit to myself that I was psychotic and I prayed for the end. I'd tried electroshock (twenty-four in all), truth serum, and some insulin shock therapy and several tranquilizers under different doctors.

I have a very liberal education, practical electronics engineer, sales, promotions, photography, physics, some chemistry. I never resented the tag "alcoholic." I accepted it as I would any other disease and read everything I could find on the subject. Nothing fit. Realizing whatever it was it was ruining my life, I tried everything suggested. All of my natural talents were for nothing. A new job meant a fast start, lots of new ideas, immediate promotion, praise; and two months later I was in such a squirrel cage I would quit the job before I was found out.

In desperation I had myself admitted to state mental hospitals at least six times and the veteran's hospital twice. Some said I was alcoholic, some said not. But not one ever offered a clue to what was wrong. I now doubt that I was alcoholic, at least until the last few years.

Included were an ulcerous spot on my anus that never healed, bad headaches, feet that were always sore and swollen. My tongue was sore and swollen all the time, I had chronic indigestion, especially after starch or sweets, and quite often vomited blood in the morning fits of cough.

I slept (in a nightmare) over twenty hours a day and was more tired when I got up. A pair of stairs was like the alps. My fingers were so clumsy, I dropped almost everything or broke it. My diet was almost entirely starch or sugar. Six candy bars before going to bed. Hot cakes with syrup for breakfast. A dozen bottles of soft drinks a day.

Around the middle of January this year I picked up a magazine with an article on low blood sugar. *(Prevention)*

Before I was finished with the second half page I knew after all these years and doctors I had found some sort of parallel to my own particular plague. I read and reread this article. How could something so simple possibly work? How could so many professional people with so much of the same information on my case have ever overlooked this possibility?

I went all the way. My diet became 100 per cent protein, no drunk ever missed liquor like I missed sugar. I got almost frantic for something sweet. In just a few days there was a noticeable change. The pressure headaches lessened for the first time in years. Being very practical, scientific and skeptical I had listed miracles as a probability but only in accord with the laws of chance.

In the first two weeks I saw a miracle—felt one. It wasn't a change from black to white, just ever-lightening shades of grey.

The frantic periods were lessening—nothing but protein, not even bread. My knees for the first time in years were flexible with much less pain. My ankles more reliable. The stabbing pains under my left shoulder were gone. I could walk without fear of falling. No dizziness or semi-faints. No woozy periods. After all of the years of living with this horror the improvement was astounding.

The fourth week I did a delicate repair and modification on an expensive camera. A month ago I would have torn it apart. I couldn't have picked up the tiny screws. The frantic periods were for the most part gone. My aspirin consumption was down to about six a day. My kidneys were under control and not freezing cold all the time. I can think constructively. Fear, fantasy and depression for the most part are gone; now they appear to be ridiculous. A short time ago carrying a small bag a block gave me additional pain in wrists, upper arm and back; this had improved.

This all sounds like a patent medicine testimony. I wonder how many mindless psychotics and alcoholics are on skid row because of the same thing, this freak metabolism, so easily corrected.

I attended many Alcoholics Anonymous meetings in the latter years. I have heard on hundreds of occasions, "Sugar will keep you away from the booze. Always carry candy when you feel like drinking." Could this well-meant advice

be as lethal as arsenic in some cases? When the candy bar is no longer adequate, alcohol sugar is faster taken and assimilated.

I have been "alive" about three months. Now it's actually a joy to get up in the a.m.

C. Richard Grossenbacher
Portland, Oregon

A Sugar Experience

In 1940 I published a magazine called *True Health Stories*, and in going over my old files I found an article (May, 1940) entitled "Cut Out Sugar—Cured A Nervous Breakdown," by Clara E. Smith. It was my first encounter with the idea that sugar could be harmful to the human body.

I will give you the article in its entirety:

It was in 1920 when I had a nervous breakdown. I had taught music for ten years, so steadily, that I went "to pieces"—as we say. I went to my physician often and one day he said to me: "No, I won't give you a drop of medicine. You just want to put a lash on a wornout horse—well I won't give you the lash. Nerves! nerves! nerves!" he called after me.

Another doctor told me, very politely in suave tones, "You may live five years."

Another doctor gave me ten years to inhabit this earth.

There was yet one more M.D. to consult, and he said, "You are headed for the insane asylum. It is rather sad, too. That is a nice boy you have there." My little son was with me.

Each physician knew I was a piano teacher and made that the goat for my extreme nervousness. For financial reasons I had to stay at my work, though at times I could only teach part of the pupils that came.

After the last verdict the doctors had given, I went for a walk to fight things out in my mind.

It was winter. The ground was frozen hard. I turned from the town and walked along the road, by empty fields, and all was as gloomy as my thoughts.

I stumbled along. I had no desire to return home. I was just in despair. What was the use, of anything? Hadn't I tried through my college days—worked overtime to make my life a success? Where were the dreams I had for later years? Stumbling over a raised portion of ground, I caught

hold of a top rail of a fence, and looking up I faced a sky like gold—turning into crimson and more gold, and fleecy clouds like gold lace, floating through the bluest sky I had ever seen. I took hold of the fence rail with a strong grip.

"I do not believe a word any of the doctors say. I will be strong and live," I thought, and I knew no one doomed to die could really walk so many miles and be lifted to such heights at the vision of a sunset while clinging to a fence rail on a winter day.

When I reached home and had entered the house, I sank into a chair. The old fear and trembling had returned. I wanted no food. I agreed that the doctors were right, and I didn't care anyway.

An hour later, my son's daddy came and laid a new magazine near me. I paid no heed until the lights came on and with the brightness my spirits rose, and I looked through the article of which I want to tell you. It was in the Bernarr McFadden publication called *Physical Culture.* It dealt with the record of a physician who reached such a physical state that no medical advice could help him, stating in this way, "They made me feel after a consultation much the same as a dog must feel when they tie firecrackers to his tail and tell him to lie down and rest." Out of his abject misery he decided sugar was a cause of nervousness and did without any sugar for three months.

He was cured. I resolved to try the plan, using for the necessary sweets, raisins, honey, and dates. For three months I used no sugar. At the end of that time I called on my first doctor again. I was entirely composed and my hands were steady. The doctor peered over his glasses and said, "What have you done to yourself? You look like a new person. Want medicine today?" "No," I replied. "I have decided not to put a lash on a worn-out horse."

"You say you didn't use sugar. . . . Well you need it for energy and warmth—but I do remember you were a wretch when you went out of here. No sugar—humph!" And he tossed his papers about on his desk.

Since that three months' trial, I have had no recurrence of that dreadful time. Beside the prohibitive sweet I would not allow dark thoughts to enter my mind, and tried to keep something colorful about me. Twenty years longer, I have continued my teaching.

A Schoolteacher Writes

For about thirty years I tried to find out what caused me to have blackouts. The blackouts varied from minor to major. When driving a car I was most conscious of the minor ones. I could feel myself going into a blackout and in a second or two I could see again. It was distressing to say the least because I was never sure they would be of short duration.

Thanks to your magazine *Prevention* I found out that sugar was the villain.

Since reading the article I have proved it to be true.

When attending elementary school my teachers complained about my daydreaming. I would sit and stare at my pencil or something, neither seeing nor thinking. (Too bad someone couldn't have known about sugar then.) My mother scolded me for not answering when spoken to, and my children have said many times, "Mom, wake up; I'm talking to you." You've no idea how embarrassing it is—present in body but not in mind. I don't know why I should have so much trouble with sweets unless it is because I seem to have a vitamin B shortage. If I run out of vitamin B for a few days, I get insomnia, my hands get numb during sleep and in the morning my ankles are stiff.

It's impossible for me to study after eating sweets. I have to read a paragraph over and over only to realize when I had finished each time that I hadn't a clue as to what I had read other than the first or second sentence. I read to the finish but my mind was a blank (in a blackout).

I can't help believe that sugar is the major cause of poor grades in schools. I've seen so many so-called immature children sit through classes as I said, "present in body but not in mind." My grandfather used to say "like a bump on a log."

Every year at the beginning of the school term I decide to say nothing about food but by the end of one week my resolution is shot. I simply have to tell the children to bring fruit to eat at the 10:30 break, and I cannot permit them to eat a big chocolate bar before lunch. I've been told by the grapevine that food is the concern of the parent, that my job is to teach. What a discouraging job it is to get an immature child through a grade (in a year) with any measure of success.

I've studied psychology for the answer and haven't found one that will bring these children up to par. Not once have I found food mentioned as the cause. Always the answer is, get down to the child's level of maturity and teach him at his own rate of development. This doesn't make the parents happy either. People don't seem to realize that the brain requires nourishment in order to function properly. As far as I can see the writers on child psychology don't, either.

Our school nurse interviewed the parents of a little boy who was very dull in class and who had for lunch a sugar-iced doughnut and butter tart with a bottle of cola—nothing more. The mother told her he wouldn't eat anything if she didn't give him such food. Fruit was like poison to him. If he couldn't have a chocolate bar at recess he wouldn't eat anything. However, most parents will cooperate, and by the end of the year the fruit habit at recess has been established, but that is about the limit. They tell me the children aren't getting any more sugar than they did a generation ago, but I see them at soda-fountain bars with lots of spending money, the like of which we never had. Is it any wonder so many are being culled from the high schools because of low grades.

Mrs. L. Jackson
Tottenham, Ontario, Canada

CHAPTER TWENTY-FIVE

Prevention *Saved his Life*

T. L. Reese of 413 E. Pyran Street, San Antonio, Texas writes:

The first copy of *Prevention* I ever saw saved my life. I picked it up one night at a friend's house and read part of it. The next day I changed my way of eating completely. That was about eight years ago. I had the worst case of ulcerated intestinal colitis that you could imagine for about ten years previously. I almost died twice.

I quit all my pills, and so-called *smooth* foods, puddings, noodles, ice cream, macaroni, etc., and started eating every-

thing a person with colitis should not eat according to the M.D.'s.

I am now forty-eight years old. I had headaches since I was twelve years old, until I read your magazine. You can guess the cause, *sugar.*

I now use no sugar at all in any way.

Thanks for the service you are rendering to people.

Sugar Cure for Rheumatoid Arthritis

My case is a proof of what the May issue of your magazine says about curing arthritis. In the '20's, I had a serious case of rheumatoid arthritis. The acute stage wore off, leaving me crippled and weak. My joints were not ankylosed, however, until my tonsils were removed. After that, exercises which were temporarily helpful were no longer effective. My back was badly bent, I could not take a deep breath, knees and hips were bent, and shoulders so fixed that I could not put my hands on my hips, plus a rigid neck. In 1933, I was lucky enough to be recommended to a doctor who, little by little, broke up the ankylosis and also gave me a proper diet. I was to avoid white sugar and refined carbohydrates, white flour, and macaroni. I could have potatoes, if boiled, with skins on and peeled carefully to preserve the vitamin B next to the skin. Honey was advised as a sweet. Any citrus fruit was to be taken well before breakfast. Of course, lemon pie and sweetened fruit drinks are taboo! I tested the combination of sugar and fruit a few times, the result being pain for at least three days, with hobbling around holding on to the furniture. Your article is the first I have seen to mention this important advice. Well, I became more and more active; finally took some summer courses and went back to teaching. At sixty-five I completed eight more years as a full-time teacher. I am now in good health.

Helen M. Jones
Provincetown, Massachusetts

Varicose Veins

I have had swelling and pain in my legs for years. It seemed to get worse for the last two years. I have no varicose veins that the doctor or I could find. There was no apparent reason for the pain. I was always on a salt-free diet during my three pregnancies but this seemed to help little. Since I have been reading the articles about

sugar in your magazine and have used no sugar for about five months, the pain and swelling have gone. It does return if I eat even a small amount of sugar, so I now sweeten with honey.

My three children and I are eating wheat germ and taking several vitamin supplements, the natural type which you recommend. Thank you for your wonderful magazine. We wouldn't be without it.

Irene Barker
Hampton, Virginia

Boils and Sties

I was particularly interested in your article in the September issue *(Prevention)* titled "Boils and Your Blood Sugar." I personally have had experience with the penicillin-resistant staphylococci organism.

About three years ago, I apparently became infected with this organism (via my patients), even though I take utmost precautions with both the patient and myself. I inadvertently brought the infection home to the family, my wife and two girls. My wife had a few areas of furunculosis, but my daughters were hit hard. Ten or fifteen boils at a time occurred on the buttocks. Sties were common, and at times, a cellulitis on the upper eyelid. A pediatrician treated the youngsters with a stock vaccine for approximately two years without success.

I finally decided to stop the use of sugar in our household in an effort to control this infection. This worked so well that the boils disappeared and so did the sties.

We are a healthier family in other ways since we stopped sugar intake. My wife was being treated for fatigue and a nervous condition. This obviously was hypoglycemia and anemia. Signs and symptons of both ailments have since disappeared.

I have advised my patients for years to be careful of the sugar intake, not only to control dental caries but to improve their total health.

Allan A. Donelli, D.D.S.
Washington, Pennsylvania

General Health

Since your first issue of *Prevention* our family has been on a practically sugarless diet. We like it very much and enjoy greater health as a result. I buy a sixty pound can of

honey from an organic farm which we substitute in place of sugar on our table. I make my own bread from freshly ground whole wheat flour and use the raw sugar—three teaspoons to a big batch.

I never make cake or pies or sweet desserts. We use fresh vegetables and fruits or frozen fruits in winter. We avoid buying any canned goods that are salted or sweetened too much. Each year we are trying to raise more of our own fruits. We always have a large vegetable garden.

Eliminating all sugars and most starchy foods from our diet we have no trouble whatsoever about overweight.

We get most of our protein from organically raised grains, cereals, eggs, etc. I serve liver once a week and a serving of beef if I can afford it.

We are practically on a vegetarian diet as we cannot afford the high cost of meat. Our doctor is much interested in our diet for we are all in the best of health—high blood counts, good clean, clear, firm skin, radiant health. Amazing, says the doctor. Yet we are on a salt-free, sugarless diet, and as starch-free as we can make it, with a minimum of meat. We try to eat living food—not *dead* food. We buy direct from organic growers who advertise in your excellent magazines.

Mrs. John Lienhard
Glenview, Illinois

Arthritis and Heart Disease

Until last fall, '64, I did not know your magazine existed. However, I had adopted a prevention diet of my own after spending up to $2,000 a year for twenty years trying to stay alive through frequent visits to medical doctors. Through all these years I ate what is taught as the basic diet and fed my family likewise. I had arthritis, heart trouble, muscular wasting, digestive disturbances and anemia. At the advice of my doctor I even ate half a pound of liver a day for three months and still had anemia.

I decided to read everything I could on arthritis since I was rapidly becoming a cripple. One theory suggested that arthritis was caused by allergy. So I developed my diet. Beginning with cottage cheese, tomatoes (fresh) and lettuce I sought to find out what I was allergic to so that I could halt my arthritis. I added one ingredient per week. I cried from craving for foods but the results were positive. After five months of careful experimenting I found that

foods heavy in sugars and starches caused pain and without them I was pain free!

After finding my valuable information I opened my new 1960 *Yearbook of American Peoples Encyclopedia.* Listed under diet and nutrition someone else had discovered and published principally the same diet.

When I see other well-known magazines that say no diet has been found that cures arthritis it makes me boil. But yet they are right since you get a relapse if you get off the diet. They should add, however, that there is a definite lessening of pain on this diet. As little as one-fourth teaspoon of sugar will make me ache; yet I can eat fresh fruits or vegetables that contain natural sugars, with the exception of a few, with no aches.

I put my three children on a sugarless diet and since then we have had no colds other than minor sniffles for three years. We used to be a family with constant colds.

I am happy to say that I am much healthier now, thanks to your magazine, for I have added important nutrients to my diet. I no longer need digitalis. I was advised to take it for the rest of my life. I am so well now that my doctor agreed with me that I no longer need it. I need no pain pills, all I take now is food supplements plus fresh fruits and raw vegetables and lean meats. It is the cheapest way to live, and *Prevention* is a good investment.

Mrs. Robert Cox
Pomona, California

Pimples

The following is from Phil Teague (address lost):

I read with much interest your magazine about sugar products. I have taken the magazine quite some time now and have always read them with interest.

I would like to relate my own experiences about sugar and how I avoid it.

All through my teens I suffered from pimples which appeared on my face, but most on my shoulders and back. I ate bakery products then and ice cream and etc.; as the years went on these pimples grew into boils with heads on them that oozed. They were sore and tender to touch, and as soon as they healed up, others appeared as fast. All through my four years in the service there were boils which persisted and would bleed at times.

After I substituted honey and maple sugar for sugar, my

boils completely dried up and left only scars. On occasions I would eat my mother's raspberry pie (made from sugar) and my boils would appear as sure as fate! Since then my mother preserves my berries in honey or nothing, and my boils have disappeared forever.

Sugar Causes Hay Fever

It is indeed very fortunate for me that I have been a subscriber to *Prevention* now for the past two years. Your article on low blood sugar prompted me to read *Body, Mind and Sugar* by Drs. Abrahamson and Pezet. Since I've been a hay fever sufferer for the past thirty years, I followed the diet suggested in the book faithfully and I am happy to say that I had none of the sneezing and uncomfortableness associated with ragweed allergy this past season. Thank you very much for your wonderful healing help.

Louis Cohen
Brooklyn, New York

The Best Baby of All

I just had a new baby three months ago. "I am forty-three years old. My first is twenty, another seventeen and one six, but this baby has been my best. She is the only one who slept all night. I give her better breast milk since I take powdered whey, lots of eggs, no sweets, only natural foods—no canned vegetables or fruits. I never thought we could change so. I used to bake five days out of seven, now I bake on weekends only—plain bread, rolls, no gooey iced stuff. We don't miss the sweet stuff either. I feel fine, not tired as I always used to be. It is a joy to be alive.

I worried when I was pregnant. I didn't know how I could take care of the little baby at my age. But here she is, three months old, and I hardly know she is around. She is so good I can't believe it. My others were so cranky.

Mrs. Louis Ramicone
Oakmont, Pennsylvania

Colds and Cavities

T. A. Lamb of Beaverdam, Virginia, writes us: We have neither bought nor used any refined sugar since the days of rationing and now we have a family of six boys. We use no candy, commercial ice cream or other foods to which we know that refined sugar has been added. When friends send candy to the boys at holiday time we give

them a quarter each to buy other toys and give the candy to the dog. Incidentally, the dog has more health sense than most people, for he just licks it a little and leaves it.

As a result, the boys have had no sign of tooth decay or pain, but pass from baby teeth to second teeth as the trees exchange their old leaves for the new. Also we are almost free from colds the year 'round. Of course we think there are other factors, too, such as raw whole milk, fruit juices, plenty of vegetables and especially potatoes baked in the jackets. Also, we use no white flour, a weekly meal of fish or seafood, no salt except vegetable salt and of course no tea or coffee.

Now to offset this loss of sugar we use plenty of natural raw honey on our cereals with whole milk, avoiding those cereals to which sugar has been added. We also keep a box of raisins of the unsulphured variety open before the boys to which they can help themselves at all times. This or other raw fruit is all they ever eat between meals. Occasionally, we make ice cream or other sweets, always with honey as the medium of sweetness.

An End to Sinus Trouble

H. C. Edinborough of Banning, California writes: We never took sugar into account until my dentist lent me Dr. Weston Price's book *Nutrition and Physical Degeneration,* available from the American Academy of Applied Nutrition, 6238 Wilshire Blvd., Los Angeles 48, California.

It really opened our eyes to the relationship of foods and health. But what really changed our eating habits was your stories about sugar in *Organic Gardening* and *Prevention.*

My wife and boy—especially my wife—have suffered from sinus trouble for years. Her sinuses had grown shut and it took a number of operations to open them up. But in spite of all kinds of treatments there was still some infection, congestion and pain. She noticed that milk and cheese made the trouble worse, so dairy products were dropped. Little did we realize that the combination of sugar and milk was causing the trouble. When sugar was completely removed from the diet, there was no trouble at all with dairy products.

All was well up to this point, but now, how to wean our sweet tooth! (It is remarkable how the two words, "sweet"

and "tooth" got put together.) . . . I had little trouble cutting out sweets but not so with my wife. She craved white sugar. As long as she ate at home she planned her meals and avoided granulated sugar and sweetened with natural sugar. She got along quite well until she would eat a cupcake, pie or something at a party, then she would come home and walk the floor, or just give in and go on a sugar binge. She realized for the first time that she had been drunk on sugar for years and was reminded of the alcoholics who can't stay away from the stuff once they get a taste of it. So from then on it was total abstinence for her. She can tell by the reaction in her system and her cravings when she has used anything but natural sugar in her diet.

I must add that her health is greatly improved.

No More Being Sickly

Your magazine has so completely changed our life and health that it is completely unrecognizable as the same we had two short years ago. We tapered off on sugar and now absolutely ban it on anything that uses it. We gave up smoking entirely without tapering off, and feel better, look better than ever and with our keen interest in a better life through health, I am sure we will have a much better future, without any signs of poor health such as illness or operations. Both myself and my wife come from families of very poor health and poor food habits, with the resulting excess of illness, cancer, heart trouble, infected teeth, arthritis, obesity and many, many others just in our immediate family alone. "What fools we mortals be." My wife is starting to get over being quite sickly and run down, thanks to *Prevention* and the many fine food supplements we have made a part of our daily life. We are determined that our two children will grow up healthy and with full knowledge of nutrition. My four-year-old boy firmly knows already that for strong muscles and good teeth the two rules are, "No candy or sweets (sugar), and brush your teeth every day," and he is proud to quote them to others. For two good examples it was easy to convince him and his sister; just count the teeth Mommie and Daddie have. Nearly every tooth we have *left* has ugly fillings, including my front teeth.

William Godbey
Los Angeles, California

Colds

The following wonderful letter came in with no name or address, but we are certain the writer will not mind our sharing it with you: We thought we were using much less candy and sweets than most people, but we have always had our share of allergies, colds and sickness. Our doctor is very much for preventive medicine if he can get his patients to try it. When I asked him how to keep from having colds, he said, "Leave sweets alone." For over a year I left out all sweets, only occasionally using honey in cookies, pie or dessert. I had better health than I had had for years. Still had an occasional cold, but less severe.... When I make bread, I save out a loaf and roll out about one-fourth inch thick. I spread it generously with applesauce, raisins and nuts. Then it is rolled up and cut as in cinnamon rolls. These are sprinkled generously with finely ground cocoanut and baked after they rise. We sprinkle cocoanut on our bread pudding or use rice and raisins for a festive appearance and brown in a warm oven. We have a rule in our family that we do not eat between meals, thus eliminating many of the knick-knacks that most children eat.

Diabetes

Although about thirty pounds underweight all my adult life, I had always eaten many sweet desserts and puddings until I finally developed a "beautiful" case of diabetes. About two years ago I began a very strict diet of no sugar of any kind or any other form of sweets except very rarely two dates or one small fig. Of course, I lost more weight (twenty-five pounds) with all sweets and most starches eliminated. Now after these two years I am beginning to gain weight slowly and have also discovered how good meals can be without one grain of sweetening of any kind. Although past sixty-five years old, I never feel tired and have no aches or pains although I work at least twelve hours a day. And there are no colds in our family any more.

My two sisters and I grow all our own vegetables and do it entirely the organic way and without any poisonous spraying. Our garden provides our table with wonderful fresh vegetables all season with plenty for freezing and winter storage.

If people will just learn what is good for perfect health and then *do it,* the reward in good health is far greater than could be anticipated before the trial effort.

Mrs. Charles McKnight
Newark, Ohio

CHAPTER TWENTY-SIX

Who Shall Do It?

LET US SAY that the powers that be agree that there should be an attempt to apply the nutritional method to curb criminal tendencies—then to whom shall be given the task of applying it—the psychiatrists, the doctors?

Health Regulation

I have always maintained that one of the greatest blunders of modern civilization is the placing of our health completely in the hands of the medical profession. I do not say we should ignore doctors when we are sick. But sickness and health are two entirely different things, and each one should have its own specialized treatment. Doctors should be in charge of disease, not health.

Now comes the famous British medical journal, *The Lancet,* and in an imaginary dialogue between Socrates and Aristodemus echoes the same sentiment. It is given in jest, of course, but if there were not a modicum of truth in it, it would not have wasted any space on it (*Lancet,* January 3, 1959). Here is the story:

Socrates: Do you think it right, Aristodemus, that the State should concern itself with the health of the people?

Aristodemus: Certainly Socrates.

Socrates: And will it do this better if one man is responsible for dealing with health, or many?

Aristodemus: One man, Socrates.

Socrates: I suppose that this man, then, should be someone who himself knows about health and sickness?

Aristodemus: By no means, Socrates. In my view he will look after the health of the people better if he knows nothing about it.

Socrates: Why do you think that, Aristodemus?

Aristodemus: The man who knows something about health and sickness will have ideas about these subjects, and so he will not come to his task with an open mind.

Socrates: He should not be a doctor then?

Aristodemus: Certainly not.

Socrates: You would not see the same objection to a lawyer?

Aristodemus: No, on the contrary, a lawyer would be very suitable.

Socrates: But after a time, I suppose, the lawyer would begin to know something about health and sickness. Would he not then become disqualified for his task?

Aristodemus: When that happens, Socrates, he should be moved to another post, and another man who is completely ignorant of the subject appointed to succeed him.

Socrates: But if the man responsible for health knows nothing about the subject, I suppose he must have advisers who do.

Aristodemus: Certainly, Socrates, but again we must be careful that they are as ignorant of health as is practicable.

The above, mind you, was written by a doctor.

The quickest way to scuttle the whole thing would be to put it into the hands of doctors. See how slow they are in the matter of smoking and cancer when the facts are indisputable.

Let a man like Dr. Fredrick Stare of Harvard have a hand in applying our idea to crime, and he will do everything possible to advise not to upset the apple cart of present-day concepts of nutrition.

Dr. Henry Winthrop, associate professor in the University of South Florida, who had spoken out against some of the artificialities in present-day food products, was severely attacked by Dr. Stare. He answered him in the *Tampa Tribune* (August 20, 1962) as follows:

> Dr. Stare seeks to discredit my remarks by stating that my fields of competence are not biology and public health. Someone ought to tell Dr. Stare that an intelligent participation in democracy does not demand that we all be specialists in disciplines relevant to

controversial issues. All that is demanded in our own American form of democracy is that we inform ourselves as well as possible on them. Any other attitude would lead to an authoritarianism which holds that the socially responsible and intelligent citizen should keep his mouth shut and leave social problems and social legislation entirely to the experts.

I still think many food problems are controversial and I also think this is true of certain aspects of research studies in nutrition. Whatever knowledge I have comes from nutritional scientists (or specialists in related areas) who are as distinguished, if not more so, than Dr. Stare. Among these are such medical men as Drs. Biskind, Exner, Nichols, Bicknell, Sir Robert McCarrison and Weston Price, D.D.S., whose famous book *Nutrition and Physical Degeneration* is highly regarded in scientific circles, and many others. If these men are incompetent, then so am I."

Ann Landers

I was in San Francisco for a winter vacation when I read in the *San Francisco Examiner* (March 11, 1967) that Ann Landers was in town to lecture at the Commonwealth Club. Her topic: "How to Survive in the Schizophrenic '60's." Miss Landers has a column in 688 newspapers with a total of 54 million readers, advising people who are in trouble.

The *San Francisco Examiner* quoted Miss Landers as saying that America's disintegrating integrity should be the greatest cause for concern to all of us.

"Prosperity has grown a fatty tissue around our conscience. . . ." She spoke of our country as "not quite as honest as it used to be," and referred to the 2½ billion dollars of annual shoplifting loss and the attitude that has almost become the eleventh commandment: Thou shalt not get caught.

"These are difficult times in which to live. We are paying dearly for our money-oriented culture."

In this country there is a tendency to protect big businesses for fear that any hardship on them would affect our economy. It is part of an ingrained system of preserving our "money-oriented culture."

Thus there has never been a full-fledged investigation covered by farm experiments to see what artificial fertilizers and pesticides are doing to our foods.

The bread bakers are permitted to use toxic additives. The big pharmaceutical companies get away with murder, and there is a very strong sugar lobby, which will holler bloody murder if any attempt is made to legislate against the use of sugar.

Also many public servants, governors, congressman and such have investments in companies whose welfare might be threatened by a program such as I suggest. Poorer people should be elected to office.

Congressman Paul Findley of Illinois has been fighting a losing fight, session after session, against the sugar lobby and the sugar program in which our government helps to keep up the price of sugar.

Regarding this lobby, *Life* (October 29, 1965) editorialized with the heading "Play My Sugar Daddy to Sugar." "Depending on how sweet your sweet tooth is, you can expect to be snitched out of two to five dollars this year strictly on account of subsidies paid to sugar producers."

The government should look ahead and show the sugar growers how to grow crops other than sugar cane or beets. It can't be accomplished all at once. There would be a rationing scheme with reductions year by year, and further government subsidies so as to give the sugar growers a chance to change over without going bankrupt.

The Plan of Action

A few years ago we had a geophysical year in which all countries and scientists cooperated regarding the geophysics of the earth. Much was accomplished. I would suggest that the President proclaim a special year to apply nutrition to the crime program and to make this program known to every man, woman and child in the United States by publicity on radio, TV, in the newspapers, the magazines, the churches, the schools, in movies to be shown on TV and in the movie theaters, and in bulletins on factory bulletin boards.

By legislation, ban all sales of soft drinks and candy in public places, lobbies of movie theaters, schools, building and factories. And ban advertising of such products in newspapers and magazines and on radio and TV.

Begin teaching the new nutrition from the kindergartens up to college level. As a cardinal supposedly said, "Give me the child until he is six years old, and you can have him afterwards."

Three of my nine grandchildren go to a Quaker school and came home one day with a tale that their teacher was giving candy to the children. My daughter told this to the principal who issued a ruling that henceforth no teacher was to do this.

Every school from kindergarten to top college level should furnish free meals based on the new nutrition. Some of this money could come out of various funds that will eventually benefit from the program.

A strong nutritional program should be begun with all the army and navy forces and other civil service employees.

This nutritional subject during this year should be discussed at every P.T.A. meeting, with members relating personal experiences on the giving up of sugar.

The new nutritional program should be strictly followed at all prisons and reformatories, with lectures from time to time, describing to the prisoners that it was probably their low blood sugar that brought them there in the first place, and how they could make new careers for themselves if they corrected this condition.

Each prisoner should be given a blood sugar checkup and observe the progressive readings.

I can see prisoners paroled if they promise to follow the new diet and come to a check-in point every couple of months; and if their blood sugar shows that it has dipped to a dangerous point, back in the clink they would go.

I can see a specially trained nutritionist attached to every court, reform school, prison and police department. Policemen should be taught the basics of the new system, and if their blood sugar gets too low they should be laid off until they can get it back up again. The new nutrition should be taught in every police academy.

Millions of dollars are being added to the taxpayers' burden each year to put more policemen on the beats. If the money were spent to educate the public and to provide free feeding centres for the vulnerable part of the population, we might be able to reduce the police force.

All people on welfare funds should have meals at public feeding points and get blood sugar tests. They must be told that unless they can keep their blood sugar at a proper level they will be removed from the rolls.

And is I have suggested before, put millions of teenagers on farms where they will produce their own food and be

taught that good nutrition will make better citizens out of them.

Finally, start free night school courses to train people to become nutritionists, to be the operatives to carry out this plan.

My suggestion is that a new office be created in the Department of Justice, staffed by laymen, to find ways to begin such a nutritional program.

You, Personally

Well, sir, or madam as the case may be, how does all this strike you? Don't you think you ought to go right out and have a blood-sugar checkup? And don't you think you should begin to clean house in your own home, and make yourself heard in your church, at P.T.A.'s, and at your place of business?

You will get more respect from your children if you get them into first-class shape through better nutrition.

A minister addressing the New York Board of Estimate recently said, "It is time we got back to the old-fashioned method and put responsibility back in the home. For too long we have had a cult of the experts who feel that only they know everything about a problem and can handle it and no one else has a right to approach it." The best place to solve the problem of juvenile delinquency is in the cooking pots of the homes.

Whether this program could be a success depends on you as an individual to make it so. You can write to your newspaper, to your congressman and senator on the state and federal levels. You can write to your minister suggesting that a series of special meetings be held to discuss this subject.

Talk to your boss, and if you *are* the boss, talk to your employees. If you have a little money, spend some of it on long-distance calls to your various elected officials in the state and federal Capitols. Try to get into discussions with groups that usually meet in public parks, *à la* Hyde Park.

Organize peaceful demonstration parades with placards.

And think of 101 other ways that you, personally, can be the means of getting this movement going. It won't be easy.

CHAPTER TWENTY-SEVEN

Conclusion

I WAS WONDERING how to finish off this book. Personally I felt that no conclusion was necessary, that the best thing now is for you to read the book over again and draw your own conclusions as you go along.

But last night something happened about which I shall tell you, and *that* will be my conclusion. My wife and I attended an ice-cream festival, sponsored by the P.T.A.'s of two elementary schools near Allentown, Pennsylvania. We had to go because some of our grandchildren went to one of the schools.

When we drew into the festival area, I was shocked! There in the huge grounds stood more than five hundred persons: men, women, children, gorging on all kinds of over-refined carbohydrate foods—ice cream, candy, cakes, soda pop, hot dogs and the rest—with the pious approval of the schools and their P.T.A.'s. Grown men were eating away on the circus type of sugar cotton on a stick—great big colored puffballs which were pure sugar. I saw people walking proudly, holding aloft cakes they had won in the "cakewalk." And the children, seeing what their elders were doing, did the same. It was to weep to think that this kind of thing was going on by the thousands all over the country, in school and churchyards. Schools and churches! Our guides and mentors!

It was a crime to permit children to undermine their nutrition at a time when good nutrition is so important to them—when their organs and bone structures are in the process of growing.

And the grownups? How many of them were on the brink of divorce? Hundreds, according to the statistics. How many of them were failures at their jobs? How many of them were obstreperously militant labor troublemakers? How many of them were irritable, unbalanced capitalists and bosses? To me these were mostly confused people, and no doubt the reason why the mentality of our times is so

mediocre. (Bad music, bad plays, hippies, juvenile delinquents, confused school systems.)

And the criminal element is muscling in in new places such as Wall Street. Soon they will be selling professorships at Harvard and M.D. degrees in the medical market place.

The band was playing "Autumn Leaves." It was autumn in the status of the people. Soon it would be winter!

Don't forget that what I saw last night was the use of sugar at a much greater rate than ever. This year I found out that this festival took in $2,500. Last year it was only $1,600. Years ago it was much less. What will this increasing overuse of sugar do to this generation in regards to its longevity? Already the death rate has turned upward. In twenty years, half the adults will be hippies; marriage and the family will be threatened.

I hope that my book will start a movement to reverse the trend. But who will pull us out of this mess? The doctors? The educators? The legislators? The criminologists?

May I tell a story: Many, many years ago, in the early days of Spain's history, a king's clothes caught fire. There were pails of water nearby, but the footmen were afraid to pour it on the burning king because they might be executed for such irreverence. So, while the courtiers argued the protocol of the situation, the king was burned to death.

Is this what we have been suffering from in connection with crime? When I wrote to the criminologists at Cambridge, they said in effect that it was not up to them to be involved in nutrition. The doctors say, "What has crime to do with medicine?" And so it goes! The buck is being passed, while the crime rate, divorce, suicide and general immorality are alarmingly on the increase. It is getting so that violence is being accepted as part of our way of life. As a newspaper says, "Brutality and the battered-baby syndrome is on the increase."

Yet, with some effort we can restore normalcy in the actions and ways of people. The evidence is here. All we need is a blueprint.

What do *you* intend to do about it? Remember, the life you save may be your own.

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SUGAR...
THE ARCH-CRIMINAL

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